CHD FiVE

User manual

Computer Hardware Design SIA
CHD Europe SIA

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1 About this document

1.1 REVISION HISTORY

Version	Date	Description	Author
1.1	04.07.2007	1. Revision history started	Janis
1.2.	19.07.2007	1. Updated screenshots in section Configuring a PDA 2. Added Networks, Communications and connection 3. Added Extend battery life [2.6]	Janis
1.3	03.08.2007	1. Added CHD FiVE section 2. Added information about cradle	Janis

1.2 KEYSTROKES

Filenames, paths, keystrokes entered by the user are shown in this `typeface`.

1.3 WINDOWS CONTROLS

Windows controls including command bar sequences, prompts, dialog boxes, fields, pull-down lists, checkboxes and radio-buttons are printed in this **`bold typeface`**.

1.4 PDA Keys

Keys on the PDA are bracketed by "greater than" and "less than" characters (< >) to distinguish them from keys on the PC, example, **<ENTER>**.

1.5 STYLUS ACTIONS

Single Tap or Select – tap the display screen once with the stylus to activate a specific button or select an item from a pull-down list.

Double-Tap – tap the stylus twice rapidly in the same location to open an application.

Tap and Hold – tap and hold the stylus to view the context menu.

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2 CHD FiVE

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2.1 OVERVIEW

Intel® X-Scale PXA255 400MHz, Windows CE.NET
The **CHD FiVE** is CHD's latest generation mobile computer device, combining a compact, rugged form factor with the flexibility of Microsoft's CE .NET 5.0 operating system and Intel® PXA255 400MHz Processor. The **CHD FiVE** is designed for retail, warehousing and logistics applications where maximum performance and durability is required in a compact handheld device.

The Most Advanced Ergonomic Design for Comfort and Scan Intensive Applications
The user-tested ergonomic design of the **CHD FiVE** has rendered a lightweight and uncommonly well-balanced device that reduces stress and fatigue during extended work sessions. Its sculpted back case is shaped to comfortably accommodate any hand size, and ergonomic positioned side scan button on both sides gives the most comfort to use for either right or left-handed users.

Comfort and Easy to Use with 30 Degree Bended Scanning Direction
The **CHD FiVE** has an unique design concept for scan engine positioning the first time in the industry. The scan engine positioned with 30 degree bended scanning angle to down side gives the users the maximum comfort and productivity for scanning. Its superior design concept helps to facilitate and increased workforce satisfaction inside the retail store, on the loading dock or on a delivery route.

Outstanding Durability
The **CHD FiVE** is designed from the ground up for rugged applications. With its IP64 sealing, 1.5m repeated drops to concrete, and wide operating temperature range, the **CHD FiVE** stands up to most any demanding application.

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2.2 SPECIFICATION

2.2.1 Physical parameters

Dimensions:	200 mm x 78 mm x 28 mm
Weight:	360 g
Keys:	• 12 alphanumeric • 3 scan • 6 function • 4 programmable • navigation key
Keypad backlight:	Yes
Operating temperature:	-10°C - 50°C
Humidity durability:	5% - 95%
Shock resistance:	1.5m repeated drops to concrete
Protection:	IP64
Indicators:	LED, vibration
Sound indicators:	Yes (Scanning)
Case:	Plastic
Case colour:	Black
Country of production:	Korea

2.2.2 System

Operating system:	Microsoft WinCE 5.0
CPU:	Intel X-Scale 400Mhz
Memory:	128MB RAM (SDRAM) 128MB ROM
Display:	3.5“, TF, TFT LCD, QVGA (240x320) color with touch

2.2.3 Barcode reader

Scanner:	Symbol SE950

2.2.4 Interfaces

Serial:	RS232
USB:	Yes

2.2.5 Communications

Wireless:	Wi-fi 802.11b/g
Bluetooth:	Bluetooth® IEEE 802.15

2.2.6 Power

Battery:	Li-ion, 2000mAh, rechargeable
Power adaptor:	5V 2A, 110/230V

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2.2.7 Cradle

Single-slot USB/RS232 charging cradle with spare battery well

2.2.8 Additional extras

DATA STORAGE:
SD Card
SYNC CABLE :
USB client, serial interface and charging cable
GUN-HANDLE :
Pistol grip
PORTABLE PRINTER :
Portable thermal printer with MSR reader, Serial/USB and Bluetooth interface
4 SLOT BATTERY CHARGER:
TBA

2.3 WARNINGS

Never apply strong pressure to the touchscreen or subject it to strong impact. If the LCD panel glass breaks do not touch the liquid inside - it can cause skin inflammation.

Use only the AC power adaptor provided by CHD or authorised dealers. The use of any other power adapter can cause electrical problems, fire or electric shock.

Unauthorized modifications and/or repairs of CHD FiVE will void the factory warranty. Please contact your dealer for support.

We recommend making regular data backups from your device. Use cradle or data cable to transfer data to PC. CHD is not responsible for any damages or loss caused by deletion or corruption of data resulting from the use of this device, including battery failure or expiration.

This device is rated at IP64 standard for water and dust protection but we do not recommend using it in extremely rainy, dusty, and/or windy conditions. If environmental conditions exceed the standards for IP64, the industrial seal may fail, voiding the factory warranty.

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3 Batteries and Power

3.1 Overview

Battery charging, installation, and information about the single-slot dock, battery charger and power cable are located in the Quick Reference Guide.

3.2 Suspend Mode

The PDA will go into suspend or sleep mode when it is idle for a configurable period of time, by default it is configured to 3 minutes. The idle duration can be customized using the Power control panel (refer to "Schemes Tab" on page 3^9). Suspend mode works and looks just like you have turned the unit off. Press the **< On/Off >** key to suspend (put to sleep) the CHD Five. Press **< On/Off >** key again for the PDA to resume its previous state.
Use the Battery Power control panel to set the idle duration and suspend mode initiation. This will save battery power when PDA is not in use.

3.2.1 Suspending

The following conditions will suspend (put the PDA to sleep):

- Press the **< On/Off >** key while the unit is on.
- The sleep timer expires, which indicates that there has been no use for a specified period of time.
- The battery pack is completely discharged.

3.2.2 Resuming

Use one of the following methods to resume (wake up the PDA):

- Press **< On/Off >** key to suspend or resume (wake up).
- Put the PDA into a dock or connect to data cable.

When a battery pack completely discharges while the unit is in suspend mode, the PDA remains suspended until the discharged battery is changed or PDA is connected to a charger.

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3.3 BATTERY

Top:

Bottom

The battery pack in the PDA is a Lithium Ion battery pack 3.7V, 2000 mAh.

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3.4 BATTERY WARNINGS AND CAUTIONS

Prior to using the PDA for the first time, you MUST charge the battery pack. The initial charging cycle for both the battery pack and back-up battery takes approximately thirteen (13) hours. Subsequent charging cycles take four (4) hours.

If you remove the battery pack or it completely discharges, there is a 2 hour window in which to insert the charged battery pack before the backup battery completely discharges. If your backup battery completely discharges, the contents of the RAM memory will be lost. If your backup battery is less than fully charged, there is proportionally smaller window of time available.

Use only the batteries, charger and cradle supplied by a CHD or CHD dealer. The use of other battery supplies can damage the PDA and void your warranty. For the correct supplies for the CHD FIVE, please contact your CHD reseller.

Lithium-ion Polymer battery packs can get hot, explode, ignite and/or cause serious injury if exposed to improper situations.

Follow the safety warnings listed below:

- Do not place the battery pack in fire or heat the battery.
- Do not install the battery pack backwards so the polarity is reversed.
- Do not connect the positive terminal and negative terminal of the battery pack to each other with any metal object (such as wire).
- Do not carry or store battery pack together with metal objects.
- Do not pierce the battery pack with nails, strike the battery with a hammer, step on the battery or otherwise subject it to strong impacts or shocks.
- Do not solder directly onto the battery pack.
- Do not expose battery pack to liquids, or allow the battery contacts to get wet.
- Do not disassemble or modify the battery pack.

The battery pack contains safety and protection devices, which, if damaged, may cause the battery pack to generate heat, explode or ignite.

Do not discharge the battery pack using any device except for the specified device. When it is used in devices other than the specified device, the battery pack can be damaged or its life expectancy reduced. If the device causes an abnormal current to flow, it may cause the battery pack to become hot, explode or ignite and cause serious injury.

In case the battery pack leaks and the fluid gets into one's eye, do not rub the eye. Rinse well with water and immediately seek medical care. If left untreated, the battery fluid can cause damage to the eye.

Always charge the battery pack within the temperature range of 0°-45°C.
Do not place the battery pack in microwave ovens, high-pressure containers or on induction cookware.

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Immediately stop using the battery pack if, while operating, charging or storing the battery, it emits unusual smell, feels hot, changes color or shape, or seems abnormal in any other way.

Do not place the battery pack in or near fire, on stoves or other high temperature locations. Do not place the battery pack in direct sunlight or use or store the battery pack in the car in hot weather. Doing so may cause the battery pack to generate heat, explode or ignite. Using the battery pack in this manner may also result in loss of performance and a shortened life expectancy.

CHD recommends annual replacement of rechargeable battery packs to ensure maximum performance.

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3.5 BATTERY DISPOSAL

Replace the battery pack only with the one sold by a CHD reseller.

When the battery is worn out, insulate the battery contacts with adhesive tape or a similar material prior to disposal.

Please recycle Lithium-Ion Batteries.

Do not throw Lithium-Ion Batteries in the trash.

3.6 EXTEND BATTERY LIFE

We recommend you to follow few steps wich extend battery life

- For first time do not turn on the unit until batteries are charged for minimum of 13 hours.
- Turn off wireless devices (Wifi/Bluetooth) when they are not used,
- Set display backlight timeout as low as possible
- Set keyboard backlight timeout as low as possible
- If possible turn off vibration after a good read.
- Set device turn off timers as short as possible.

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4 Reset CHD FiVE

4.1 SOFTWARE RESET

If the device hangs up or does not respond to any action please perform software reset.

Using stylus press reset button for 1 second and release. Reset button is located between **< Navigation >** and **< 1 >** & **< 2 >** buttons.

All unsaved data will be lost when performing a software reset.

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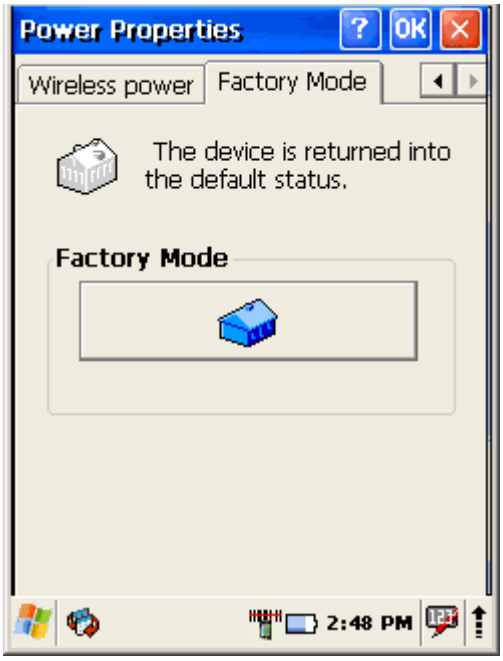
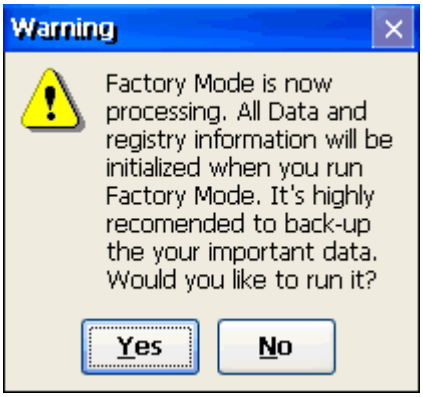
4.2 FACTORY MODE



If performance of the device becomes unstable or settings have been changed to the state when it is not possible to revert them.
It is recommended to perform reset to factory mode.

1. Select
`Control Panel -> Power -> Factory mode tab`
2. Tap on **`Factory mode`**
3. Confirm by taping on **`Yes`**
4. After restart you will need to align screen


Warning
Factory Mode is now processing. All Data and registry information will be initialized when you run Factory Mode. It's highly recomended to back-up the your important data. Would you like to run it?
Yes
No

All data and custom settings will be lost if Factory mode is performed. It is recommended to backup all your data to removable storage or to other computer before performing a Factory mode.

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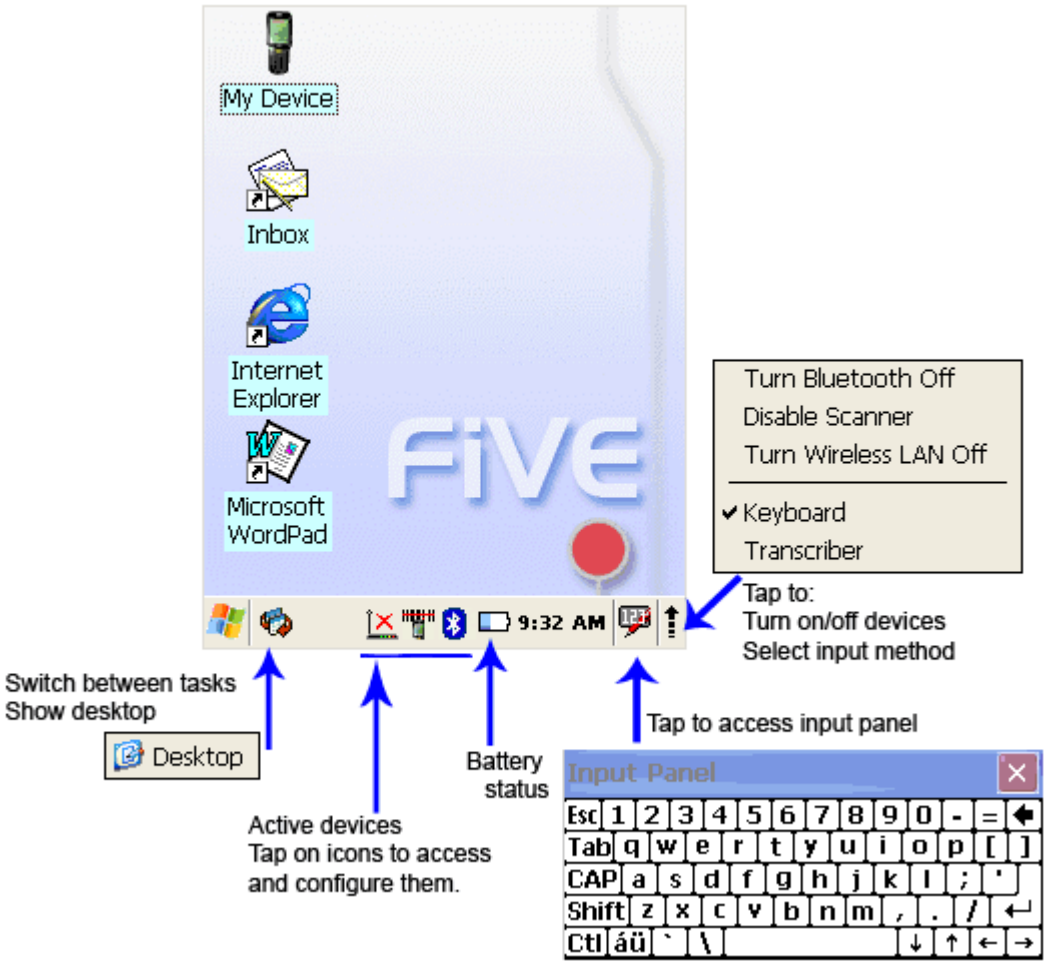
5 Using CHD FiVE

5.1 DESKTOP

Workflow is like all other Microsoft operational systems.

To run the program - double tap on a shortcut icon on desktop or run program from Start menu.

Below is standard CHD FiVE desktop layout.



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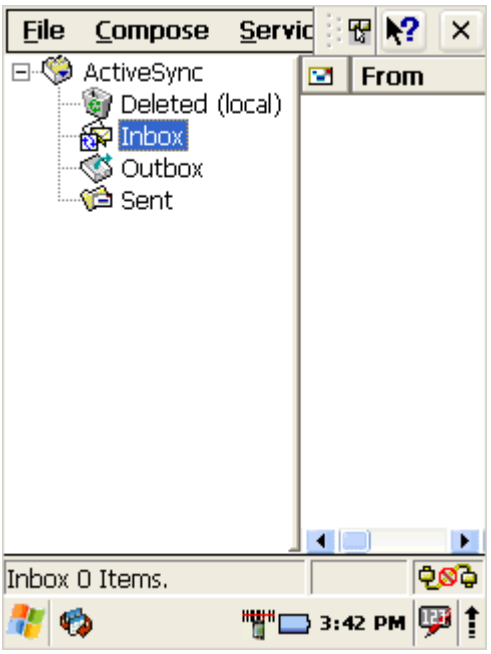
5.2 INBOX



The PDA comes with Inbox for Windows CE .NET installed from the factory. Inbox is a familiar Microsoft email interface.

To set up Inbox:

1. Select `Start > Programs > Inbox`
2. Select `Services > Options` from the command bar.
3. Drag the dialog to show the right edge to configure email.
4. Select **`Add...`**
5. Select **`Service Type`** and enter in name of email service in the **`Service Name`** field.
6. Select the type of service.
7. Enter the server and user information in the **`Mail Service Definition`**.
8. Configure your inbox using the **`Mail General Preferences`** dialog.
9. Configure your mail retrieval settings using the **`Mail Inbox Preferences`**.
10. Press **`OK`** to complete the Inbox configuration.

Receiving email

1. Select `Services > Connect` from the command bar.
2. Select `Services > Send/Receive Mail` from the command bar to manually retrieve mail. Any pending email appears in the inbox after connecting.

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5.3 INTERNET EXPLORER

The PDA comes with the Internet Explorer for Windows CE .NET installed

Open Internet Explorer by selecting
`Start > Programs > Internet Explorer`.

To set a default home page,
1. Navigate to the desired default web page.
2. Select `View > Internet Options` from the command bar.
3. Enter the desired URL in the Start Page field.
4. Press the **OK** button

Internet Explorer uses sliding menus for application and navigation control. Tap and drag the sliding menus to the left or right to see the hidden menu items and toolbars.

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5.4 QUICK SCANSET APPLICATION

CHD FiVE comes with preinstalled scanner software. Application works in background and has a System try icon next to battery level icon.

Test barcode scanning

Go to `Start > Programs > Scanner > Scandiag` to open scan dialog

Refer to Scanner configuration, Section 0 for more information about scanner settings

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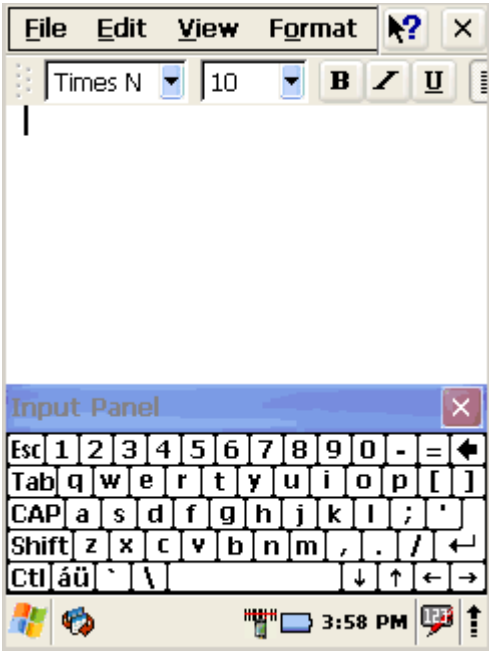
5.5 WORD PAD



The PDA comes with WordPad for Windows CE .NET installed from the factory.

To start Wordpad, select
`Start -> Programs -> Microsoft WordPad.`
The following text and document file types are compatible with WordPad:

- Text (* . txt)
- Word Document (* . doc)
- Rich Text File (*.rtf)
- WordPad (*.pwd)

When you transfer file types other than * . pwd to the Windows CE .NET device, it translates the files into a compressed Windows CE .NET file type.

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5.6 INSTALLING PROGRAMS

Programs pre-installed on the device are stored in ROM (read only memory). You cannot remove, or modify this software. You may add programs and data files to RAM (random access memory) or into memory card. Please follow the directions provided with the software to install it.

5.6.1 Using an Installation Wizard

If the file has an installer, the installation wizard begins. Follow the directions on the screen. Once the software is installed on your desktop computer, the installer transfers the software to your terminal automatically.

5.6.2 Installing Programs Manually

If the file does not contain an installer, an error message indicates the program is valid but is designed for a different type of computer.

1. Install * . cab, * . exe, * . zip, setup. exe files, or other files designed for the device.
2. Windows CE .NET applications will also work on the device.

Start by downloading the program to your desktop computer (or insert the CD or disk that contains the program into your desktop computer).

1. Select `Start > Settings > Control Panel > System > General` on device. Make a note of the information in the processor field.
2. Read the installation instructions, ReadMe files, or manual that comes with the program. Many programs provide installation instructions. If you cannot find installation instructions for the program in the ReadMe file or manual, use ActiveSync Explorer to copy the program file to the Program Files folder on your device. For more information on copying files using ActiveSync, refer to the ActiveSync online Help.
3. Connect your PDA and desktop computer.
4. Double-click the * . exe file.
5. Once the installation is complete, you double-tap the program icon from your desktop, or select Programs > program icon to select it.

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5.6.3 Using ActiveSync to Add to the Start Menu

1. Use the Explorer in ActiveSync on your desktop computer to explore the files on your PDA and locate the program. For more information on using ActiveSync, refer to the ActiveSync online Help.
2. Right-click on the program, then select **`Create Shortcut`**.
3. Move the shortcut to the **`Programs`** folder in the Windows folder. The shortcut appears on the menu.

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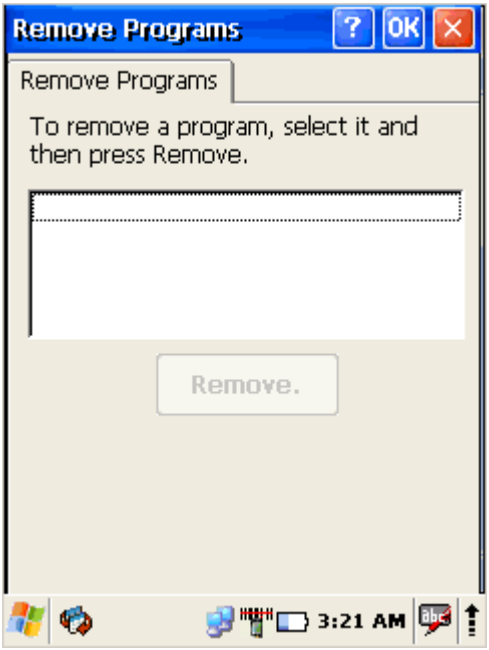
5.7 REMOVING PROGRAMS



Only user installed programs can be removed.
To remove a program

1. select `Start > Settings > Control Panel > Remove Programs.`
2. Select the program you wish to remove from the list
3. Press **Remove**.
4. After uninstall tap on **OK**

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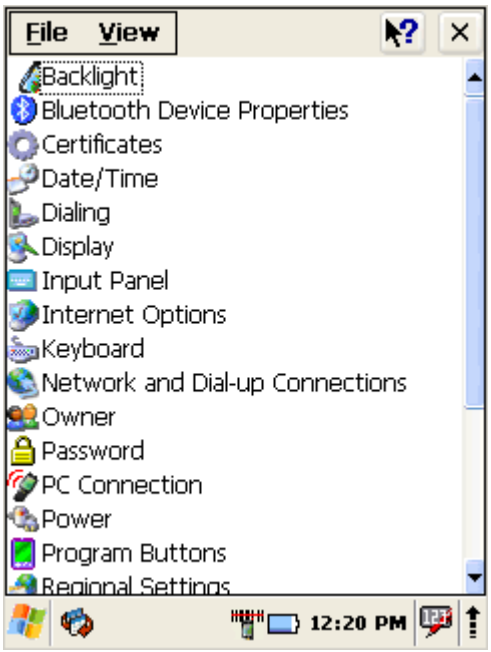
6 Configuring a PDA

Customizing the Settings
To change the settings on your new PDA, select
`Start > Settings > Control Panel`

The list of settings (except Quick ScanSet applet) is standard Windows CE .NET settings. For more information on the Windows CE .NET operating system, please refer to Microsoft's website at
http://www.microsoft.com/windows/embedded/ce.net/
.



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6.1 STYLUS

You might need to align the touch screen (i.e. when you notice that when you attempt to select one item with the stylus, another item is erroneously selected).

To align the touch screen,

1. Open
   `Start -> Settings -> Control Panel -> Stylus`
   OR
2. Press **< FUNC >** + **< Space >** on keyboard
3. Align Screen dialog shows on screen
4. Carefully press and briefly hold stylus on the centre of the target as the target moves around the screen.

Stylus Properties
OK
Calibration
If your device isn't responding properly to your taps, you may need to recalibrate your screen.
To start the recalibration process, tap Recalibrate.
Recalibrate
3:24 AM

Align Screen
Tap the target firmly and accurately at each location on the screen. The target will continue to move until the screen is aligned.

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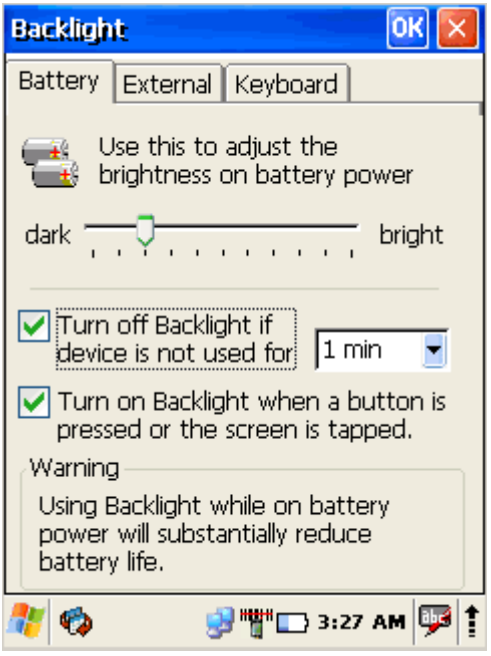
6.2 BACKLIGHT

Modify display and keyboard backlight brightness. Also set backlight options (i.e. turn off time).

To modify backlight settings open:
`Start > Settings > Control Panel > Backlight`

6.2.1 Battery power



Modify display backlight settings when device runs on batteries.

- Set display brightness level
- Set backlight timeout time.
  Available options:
  10 sec *(by default)*
  30 sec
  1 min
  2 min
  3 min
  4 min
  5 min
- Enable to turn on backlight when a button is pressed or the screen is tapped

To extend battery life it is recommended to set display backlight turn off timer as short as possible.

To extend battery life it is recommended to set display backlight brightness level as low as possible.

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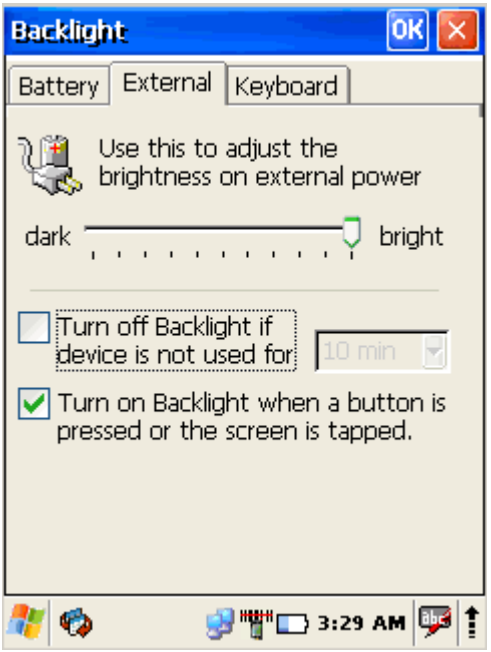
6.2.2 External power



Modify display backlight settings when device runs on external power.

- Set display brightness level
- Set backlight timeout time.
  Available options:
  `10 sec` *(by default)*
  `30 sec`
  `1 min`
  `2 min`
  `3 min`
  `4 min`
  `5 min`
- Enable to turn on backlight when a button is pressed or the screen is tapped

Device is plugged into external power supply and those settings do not affect battery life.

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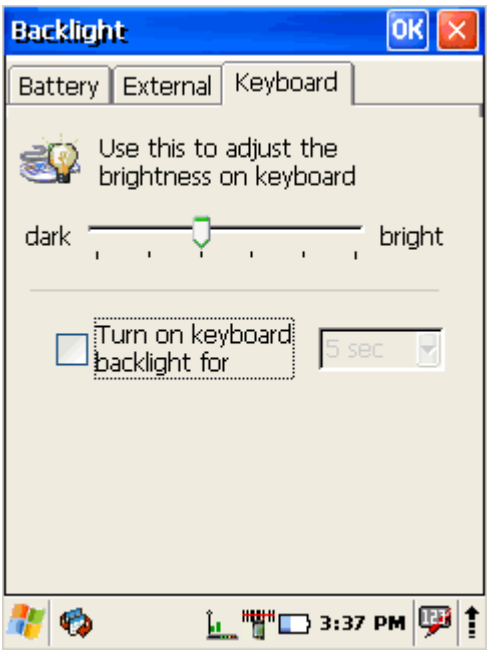
6.2.3 Keyboard backlight



Set keyboards backlight timeout.

By default this is turned off.

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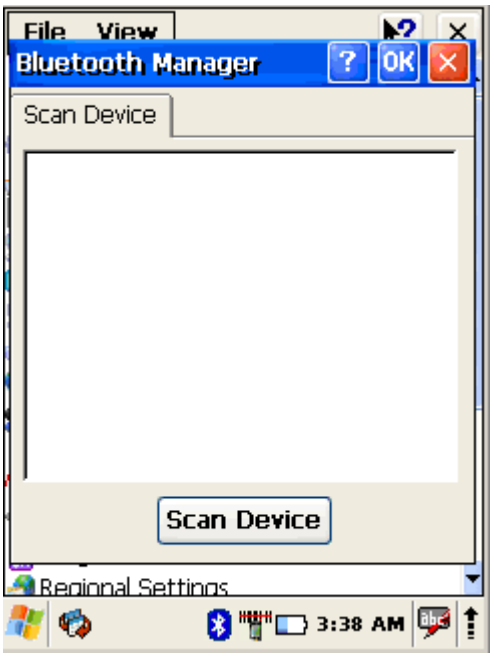
6.3 BLUETOOTH

Select
`Start -> Settings -> Control Panel -> Bluetooth devices`

Click **Scan Device** button to scan Bluetooth devices in range.



About connecting to Bluetooth enabled devices read more at section – Bluetooth.

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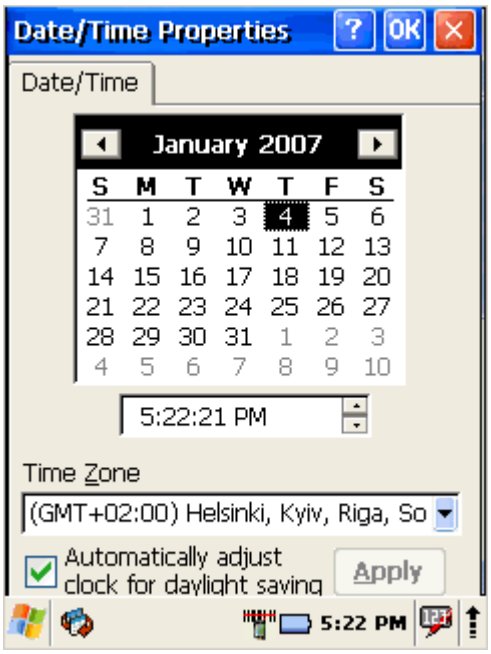
6.4 DATE AND TIME

Date/Time

In the Date/Time options, you can change the year, month, date, time, time zone, or select automatic adjust for Daylight Savings Time.


Date/Time Properties
OK
Date/Time
January 2007
S M T W T F S
31 1 2 3 4 5 6
7 8 9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30 31 1 2 3
4 5 6 7 8 9 10
5:22:21 PM
Time Zone
(GMT+02:00) Helsinki, Kyiv, Riga, So
Automatically adjust clock for daylight saving
Apply
5:22 PM

To set or change the date and time:

1. Open Date/Time Properties
   `Start > Settings > Control Panel > Date/Time`
2. Select month
   Tap on month name to open a pull down list of months or press the arrow buttons on either side of the month to increase or decrease the month.

3. Change the year
   Tap on the year to open a numeric dial.
   Select the up arrow to increase the value; select the down arrow to decrease the value.
   Or you can type a new value in the field.

4. Change the time,
   Select the hour, minute, seconds, or AM/PM and select the up arrow to increase the value; select/tap the down arrow to decrease the value. You can also type a new time value in the field.
5. Select your correct time zone from the pull-down list.
6. To automatically adjust the clock for Daylight Savings Time, enable the checkbox at the bottom of the screen.
7. Select Apply to make save your changes [and make additional modifications] or select OK to exit the Date/Time settings.

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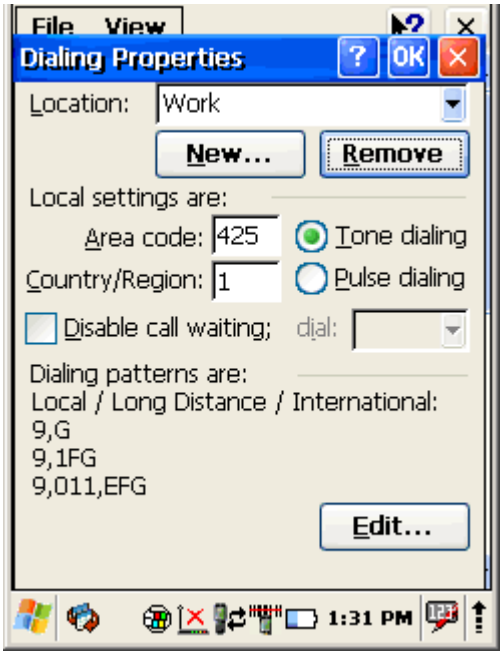
6.5 DIALING



Change dialling properties
1. Select
`Start > Settings > Control Panel > Dialling properties`
2. Tap on **`Edit`** to change dialling patterns and prefixes
3. To exit, press **`OK`** from the command bar, or press the **`< ENT >`** key on the keypad

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6.6 DISPLAY PROPERTIES

To modify the display and/or backlight of the PDA refer to the following:

6.6.1 Background

Change background image:

The current file is located in the Windows directory with the CHD logo file named logo.bmp. Place a new image in the Windows directory. Image must be exactly 240 by 320 pixels.

1. Select `Start > Settings > Control Panel > Display`.
2. Press **`Browse`** and select new image.
3. Tap on **`OK`** to save settings.

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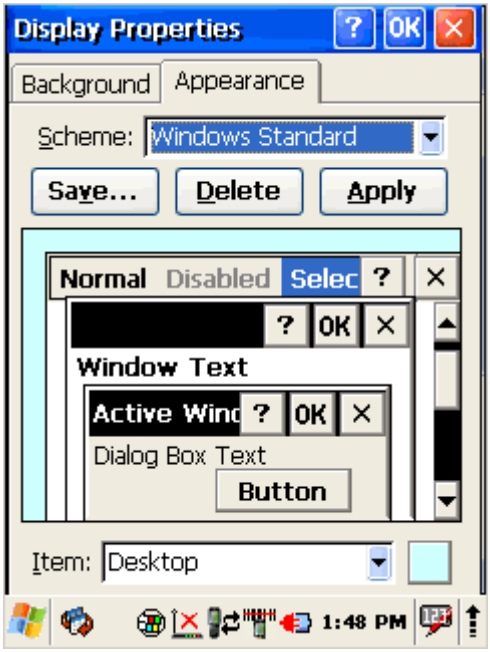
6.6.2 Appearance

Change Windows appearance default settings:



1. Select `Start > Settings > Control Panel > Display > Appearance` tab.
2. Select the desired item form **`Items`** dropdown menu
3. Press on color box to change items color
4. To save your created appearance scheme tap on **`Save...`**
5. To exit Backlight settings, press **`OK`** from the control bar.

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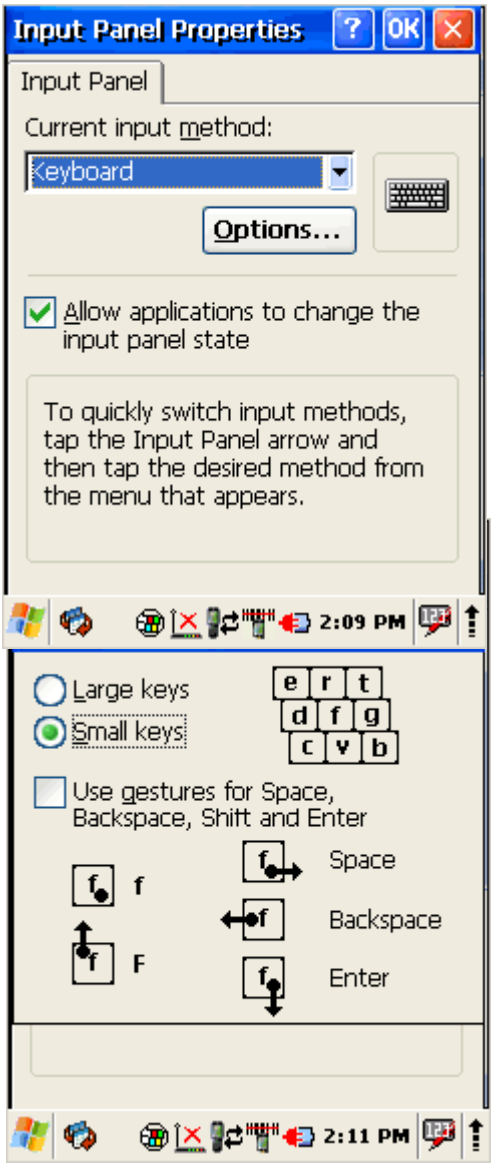
6.7 INPUT PANEL

Adjust input panel behaviour and settings.

Input Panel



Change the Soft Input Panel settings:

1. Select `Start > Settings > Control Panel > Input Panel`
2. Change the desired settings.
3. To change the Soft Keyboard Options, tap on the **`Options`**
4. Change the soft keyboard options , selecting from:
   - Large or small keys.
   - Using gestures for space, backspace, shift, and enter.
5. To exit the Soft Keyboard Options, press **OK** on the control bar, or press the **< ENT >** key on the keypad.
6. To exit Input Panel settings, press **OK** from the control bar, or press the **< ENT >** key on the keypad.

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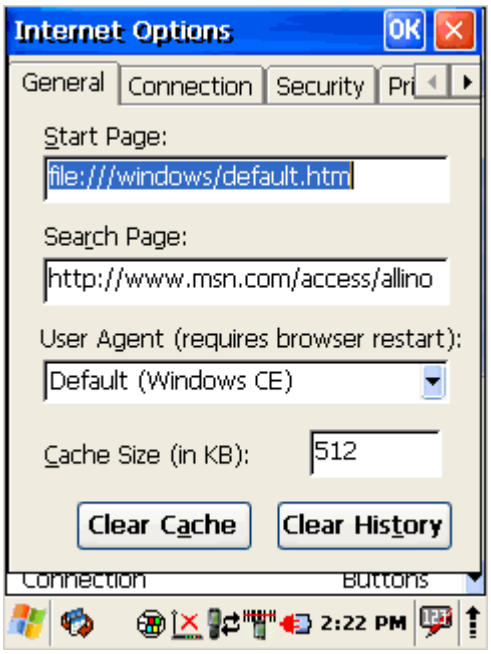
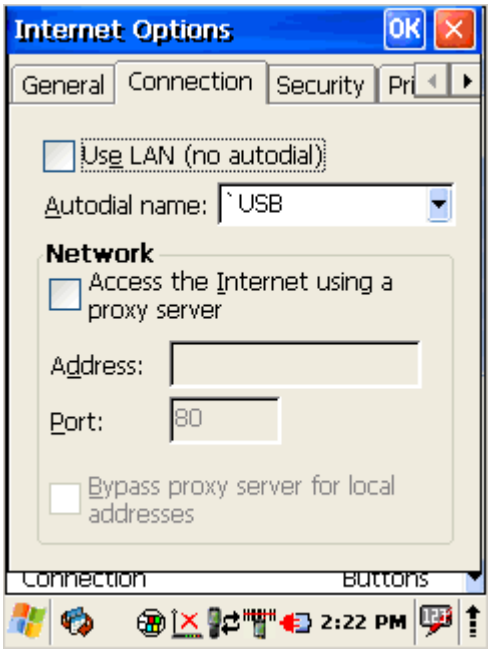
6.8 INTERNET SETTINGS

To change the Internet default settings:

1. Select
   `Start > Settings > Control Panel > Internet Settings`
2. On the **`General`** tab type in the URL of the desired start page and the desired search engine. You can also change the **`Cache Size`**, clear the **`Cache`**, and clear the **`History`**.



3. On the **`Connection`** tab modify the network access settings as desired.



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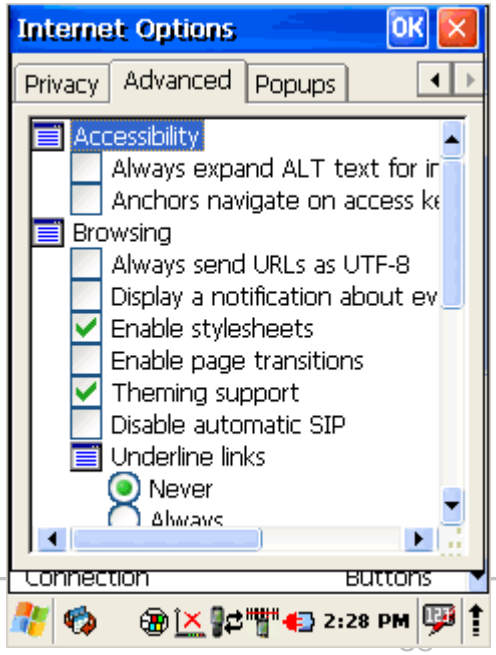
4. On the **Security** tab change browsing security options.

5. On the **Privacy** tab set cookies options

6. On the **Advanced** tab change advanced browser options



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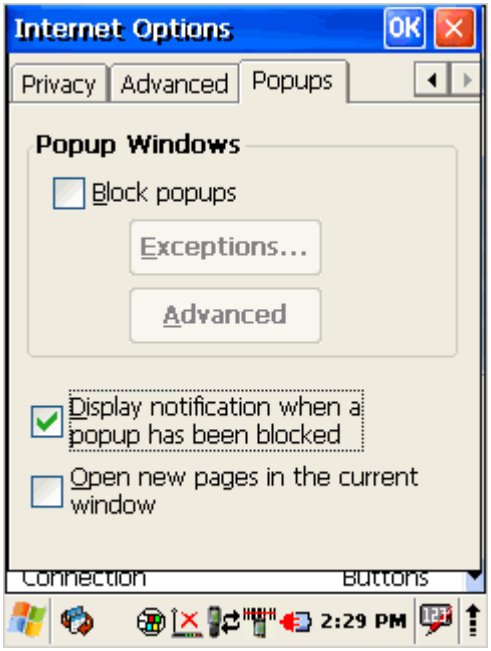
7. On the **Popups** tab specify to allow to show or block popups

8. To exit Internet Options, press **OK** from the control bar, or press the **< ENT >** key on the keypad.



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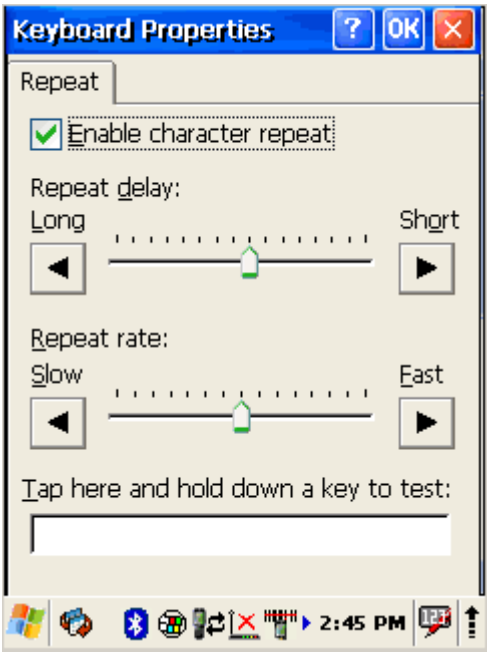
6.9 KEYBOARD PROPERTIES

Keyboard



Adjust device actions while keyboard key is pressed down.

1. Select
   `Start > Settings > Control Panel > Keyboard properties`
2. **`Enable character repeat`** -
3. Adjust **`Repeat delay`** slider to change delay time between two inserted symbols while keyboard key is pressed.
4. Adjust **`Repeat rate`** slider to change repeat rate when keyboard key is pressed.
5. To exit Keyboard properties, press **`OK`** from the control bar, or press the **`< ENT >`** key on the keypad.

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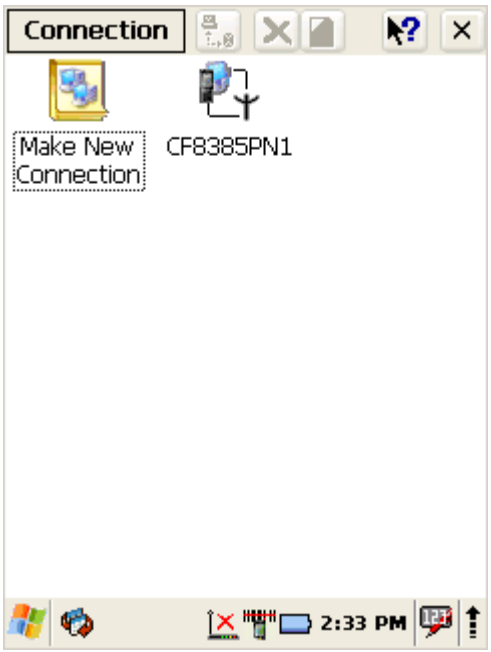
6.10 NETWORK AND DIALUP CONNECTIONS



To create new or edit current network connection settings

1. Select
   `Start > Settings > Control Panel > Network and dialup connections`
2. Double tap on **`Make New Connection`**
3. Enter connection name
4. Select connection type
5. Press **`Next`**
6. Configure connection

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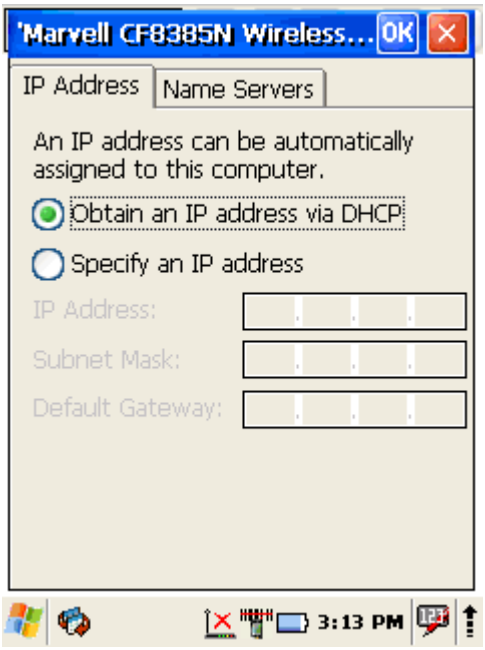
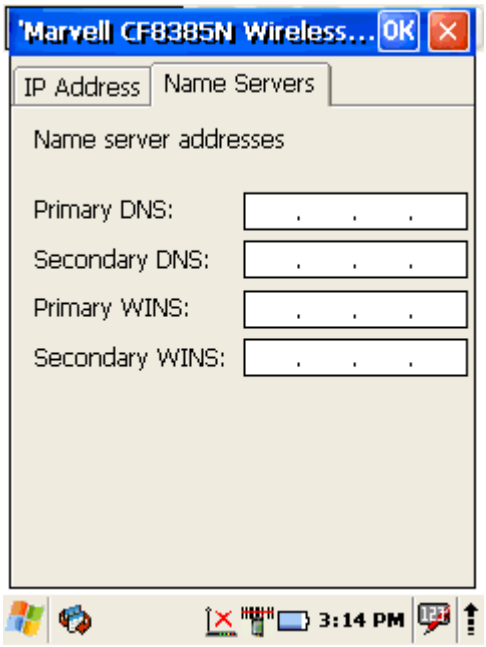
6.10.1 Change IP address or DHCP settings



1. Select
   `Start > Settings > Control Panel > Network and dialup connections`
2. Tap and hold on connection
3. Press **`Properties`**
4. Select to automatically obtain an IP address via DHCP or manually enter the address



5. Click on **`Name Servers`** tab and enter DNS servers IP addresses
6. To exit Network connection properties, press **`OK`** from the control bar, or press the **`< ENT >`** key on the keypad.

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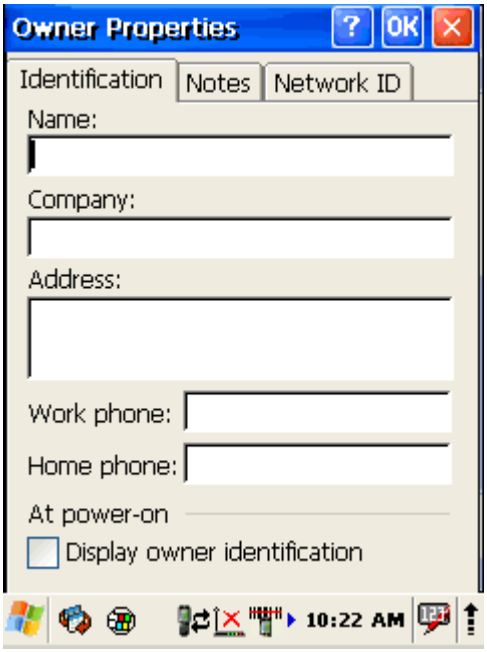
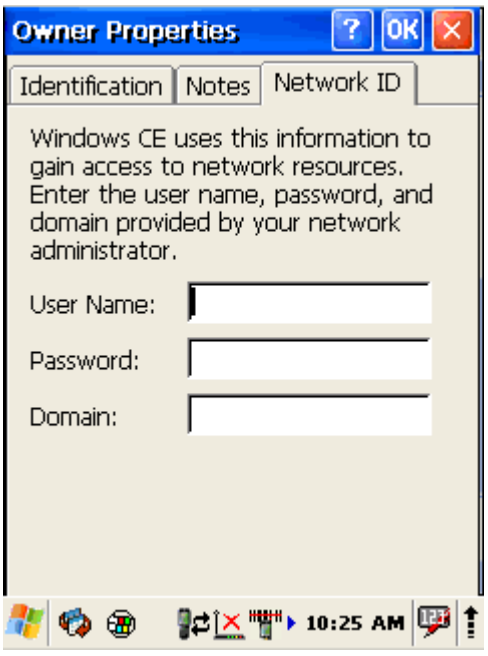
6.11 OWNER

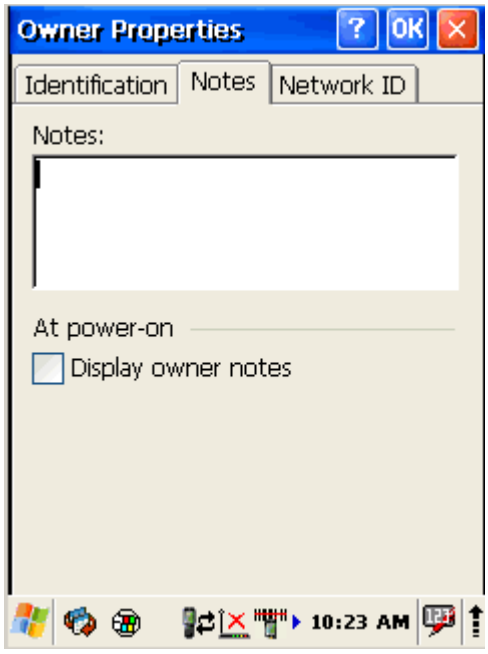
Owner



To change the Owner default settings:

1. Select `Start > Settings > Control Panel > Owner Properties`
2. Enter data using the input panel or the keypad on the PDA.
3. In the **`Notes`** tab set additional notes.
4. In the **`Network ID`** tab enter information to gain access to network resources.
5. To exit the Owner Properties control panel press **`OK`** from the control bar or press the **`< ENT >`** key on the keypad.





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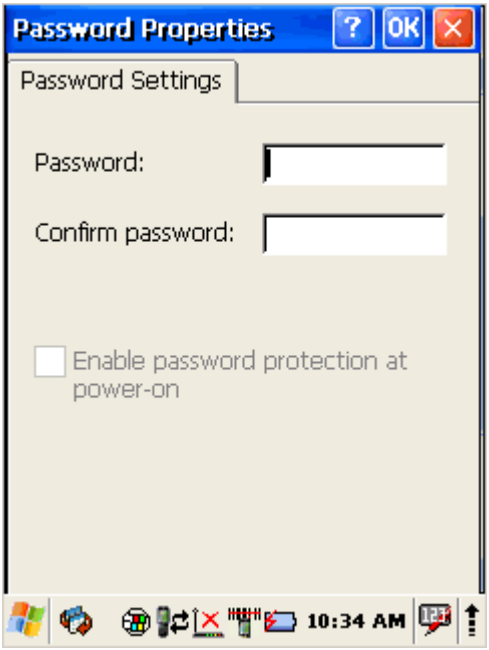
6.12 PASSWORD

Password



To change the Password default settings:

1. Select `Start > Settings > Control Panel > Password Properties`
2. Enter the desired password twice as indicated in the two fields.
3. Select to enable password protection at power-on.
4. To exit the **`Password properties`** panel, press OK from the control bar, or press the **`< ENT >`** key on the keypad.

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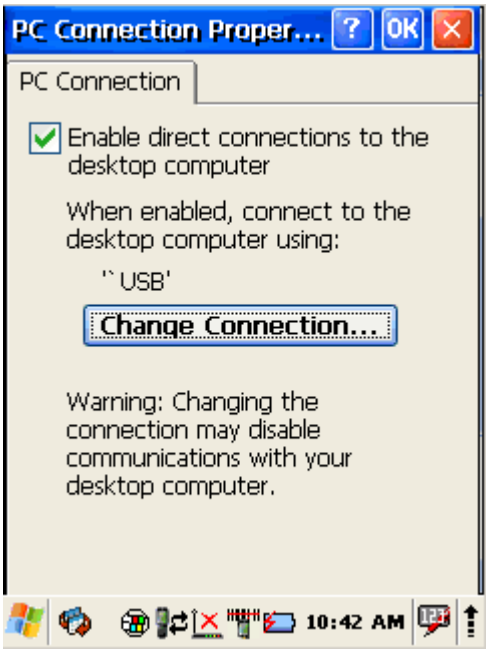
6.13 PC CONNECTION

PC Connection


PC Connection Proper...
OK
PC Connection
Enable direct connections to the desktop computer
When enabled, connect to the desktop computer using:
'USB'
Change Connection...
Warning: Changing the connection may disable communications with your desktop computer.
10:42 AM

The PC Connection control panel determines how ActiveSync works with the PDA. To modify the default settings:

1. Select `Start > Settings > Control Panel > PC Connection`.
2. Select the first checkbox to enable direct connections to the desktop computer.
3. Tap the **`Change Connection`** button to modify the connection method from USB or Serial.
4. To exit the **`Change Connection`** dialog, press **`OK`** from the control bar, or press the **`< ENT >`** key on the keypad.

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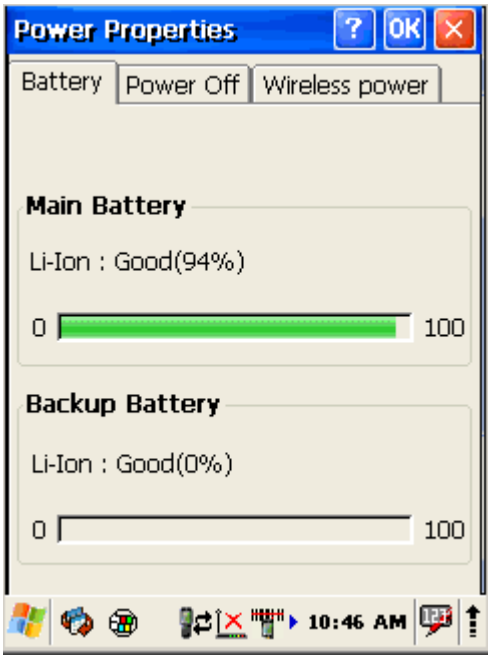
6.14 POWER PROPERTIES

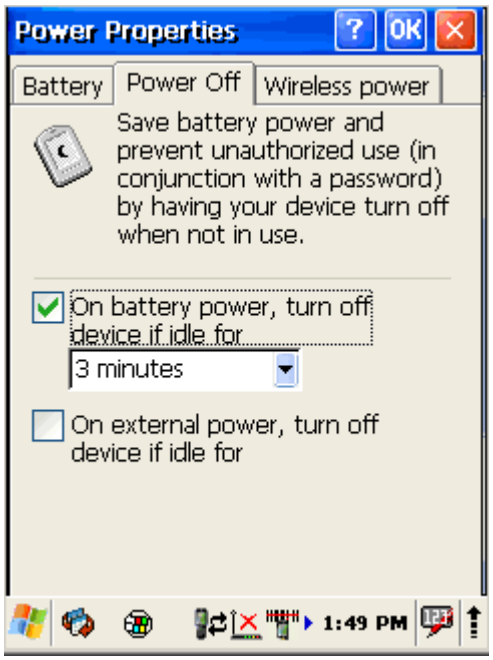
Power



6.14.1 Battery tab

To see main and backup battery level indicators open `Start > Settings > Control panel > Battery` or double tap on **`Battery`** icon in taskbar.

6.14.2 Power off tab


Power Properties
OK
Battery
Power Off
Wireless power
Save battery power and prevent unauthorized use (in conjunction with a password) by having your device turn off when not in use.
On battery power, turn off device if idle for
3 minutes
On external power, turn off device if idle for
1:49 PM

To adjust power management settings,

1. Select `Start > Settings > Control Panel > Power.`
2. Set idle time when on battery power before device suspends.
3. Set idle time when on external power before device suspends.
4. To exit, press **OK** from the command bar, or press the **< ENT >** key on the keypad.

To save battery life it is recommended to set idle time as short as possible.

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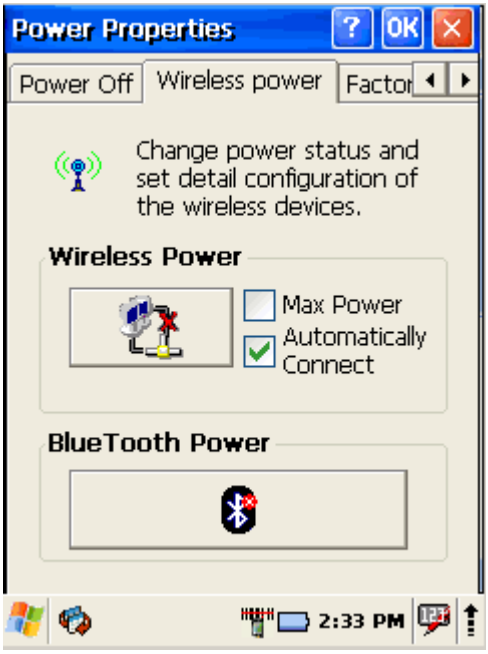
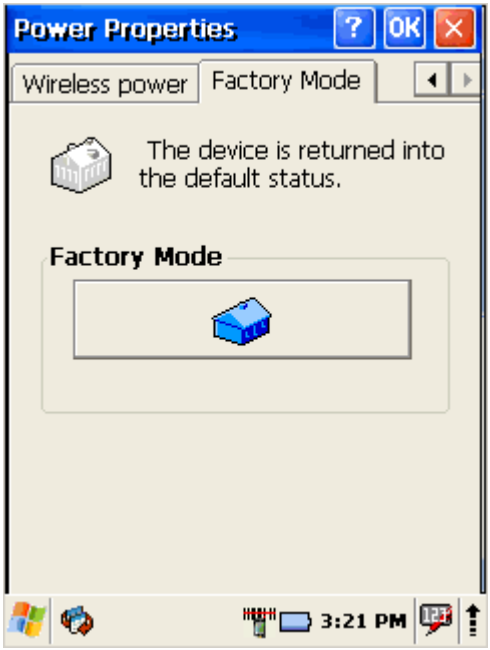
6.14.3 Wireless power tab



Turn on or off and set detailed configuration of the wireless devices.

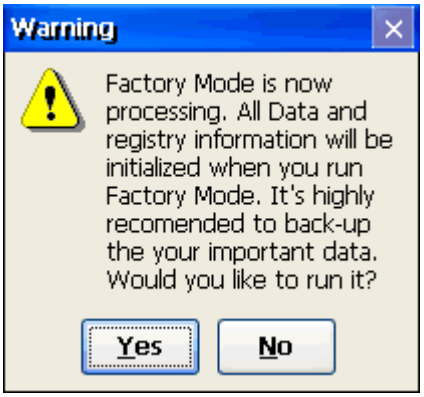
1. Open `Start > Settings > Control Panel > Wireless power`
2. Enable **`Max Power.`** Wireless device will work with maximum power. This option shortens battery life.
3. **`Automatically Connect`** – after wake up device will automatically reconnect to available preferred wireless network.
4. Tap on **`Wireless power`** button to turn on wireless.
5. Tap on **`BlueTooth Power`** button to turn on Bluetooth wireless device.
6. To exit, press **`OK`** from the command bar, or press the **`< ENT >`** key on the keypad.

6.14.4 Factory Mode tab



If devices performance becomes unstable or settings have been changed to state when it is not possible to undo them then it is recommended to perform reset to factory mode.

5. Select `Control Panel -> Power -> Factory mode tab`
6. Tap on **`Factory mode`**
7. Confirm by taping on **`Yes`**
8. After restart you will need to align screen


Warning
Factory Mode is now processing. All Data and registry information will be initialized when you run Factory Mode. It's highly recomended to back-up the your important data. Would you like to run it?
Yes
No

All data and custom settings will be lost if Factory mode is performed. It is recommended to backup all your data to removable storage or to other computer before performing a Factory mode.

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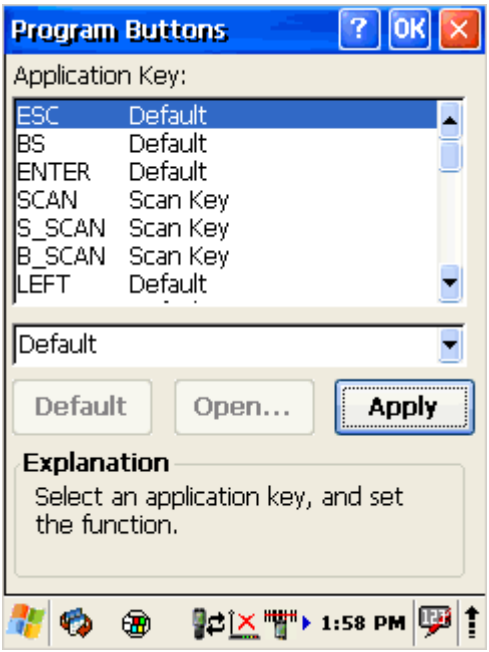
6.15 PROGRAM BUTTONS



1. Select
   `Start > Settings > Control Panel > Program buttons`
2. Select programmable button from the list
3. Chose its type:
   - **`Default`** – button will be assigned default function
   - **`No function`** – button does not have any functions
   - **`Scan key`** – button is used as Scan key
   - **`Application`** – click on **`Open`** button and select application to bind with this key
4. To exit, press **`OK`** from the command bar, or press the **`< ENT >`** key on the keypad

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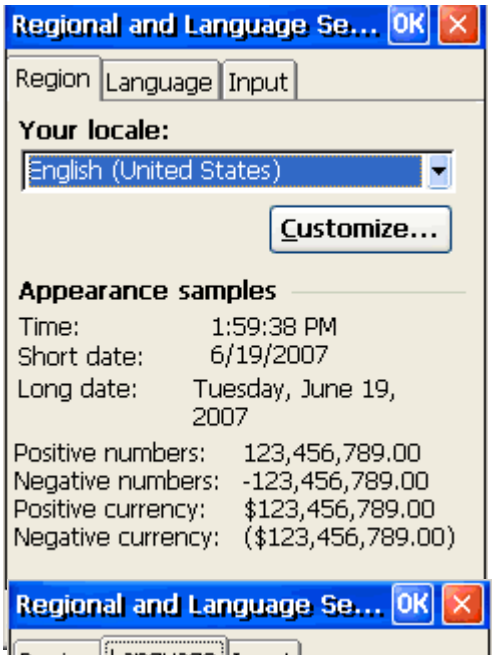
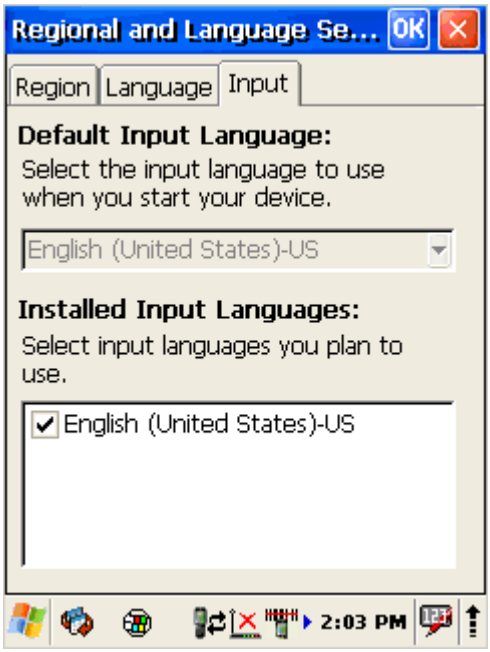
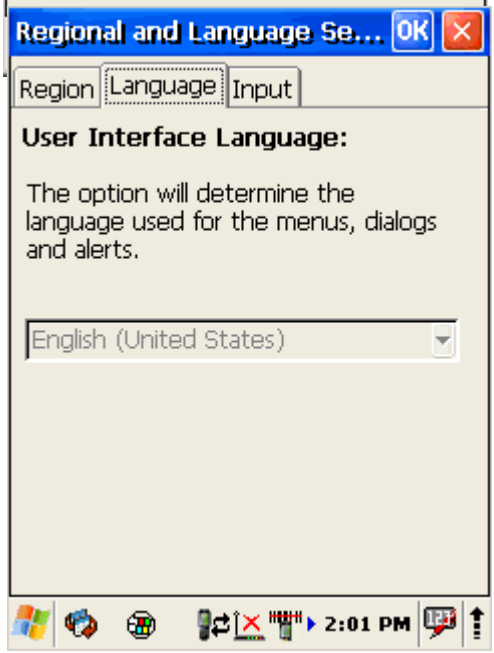
6.16 REGIONAL SETTINGS

To change the Regional Settings defaults:

1. Select `Start > Settings > Control Panel > Regional Settings`.
2. Select the desired language/location.
3. Review the Appearance Samples in the bottom half of the screen. Select the tab at the top for any settings you wish to change. Options to modify include Number, Currency, Time, and Date.
4. To exit **`Regional Settings`**, press **`OK`** from the control bar, or press the **`<Enter>`** key on the keypad.







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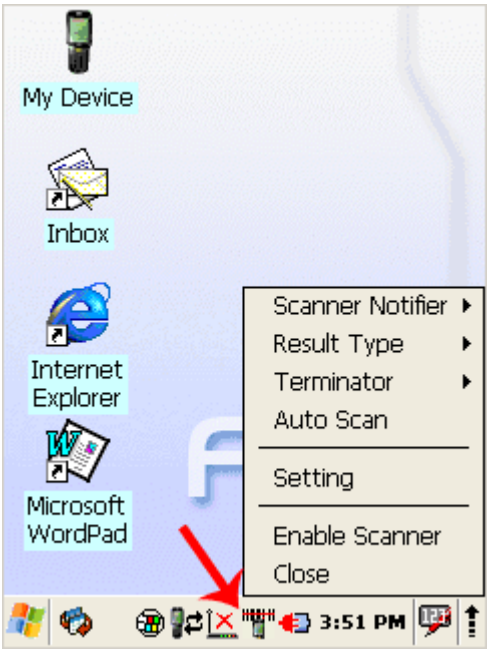
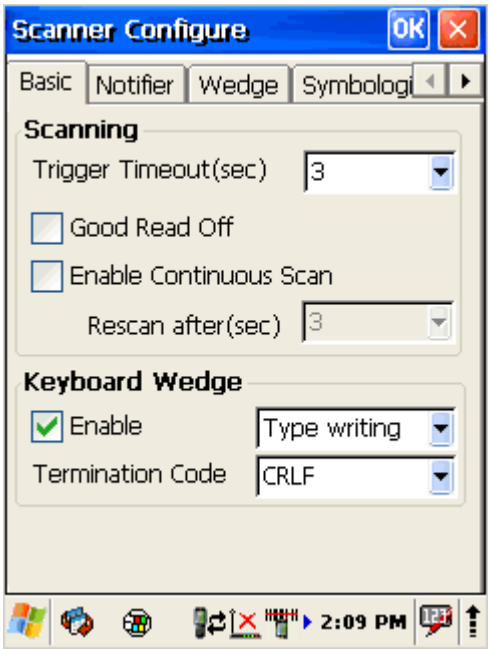
6.17 SCANNER CONFIGURE

To change the Scanner Settings and bar code types, complete as follows:
Go to
`Start > Programs > Scanner > Quick ScanSet`
to open the bar code scanning application. The only indicator that the program is open is the bar code System Tray icon. Quick ScanSet starts automatically as device boots.
Select/tap the bar code icon in the System Tray to open the menu shown in image on the left.



• Select **`Settings`** to open the **`Scanner Configure`** applet.



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	Section	Option	Description
Basic	Scanning	Trigger timeout (sec)	Set scanner timeout time
		Good read off	Scanner will stop scanning after good read.
		Enable continuous scan	Scanner will scan continuous until if checked good read.
		Rescan after (sec)	Set rescan time if enabled continuous scan
	Keyboard wedge If enable Keyboard wedge - software program that interfaces with a computer to translate data read by a device other than a keyboard, such as a magnetic strip or bar code reader or other such scanning device, into keyboard data.	Enable	Check to enable keyboard wedge Options: “Type writing“; “Copy & paste” Select data input method according software you use
		Termination code	Select the desired barcode end method from the pull down list
Notifier	Beep If enabled – plays audio sound		
		Volume	Set sounds volume
		Succeed	Set sound to indicate good read
		Fail	Set sound to indicate bad read
	LED	Enable	Enable visual scan indicators
	Vibrator If enabled	Succeed:	Set devices vibration time after good read
		Fail:	Set devices vibration time after bad read.
Wedge	Barcode ID	Transmit Barcode ID	Enable to transmit barcode ID
	Label	Prefix	Enter labels prefix
		Suffix	Enter labels suffix
	Filter	Accept	Set filter conditions to accept
		Deny	Set filter conditions to deny
Symbologies	Select barcode types you want to read		
Details		Enable this code	Tap/enable this checkbox to enable the selected bar code type.
		Features	Select the desired features you wish to enable for that specific bar code type.
		Length	Set the minimum and maximum lengths from the pull-down lists. If the numbers are the same, acceptable bar codes will only be that length. Not all types will have this option enabled.
General		Try with Current Setting	This button is enabled only if you make changes to the current settings. 1. Tap the Try with Current Setting button. 2. Press the <Scan> key. 3. Check the result. 4. If you wish to keep the new current settings, select the Commit Current Setting

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			button.
		Commit Current Setting	After modifying the current settings, if you wish to keep them, select the Commit Current Setting button.
		Load Factory Default	After modifying the current settings, if you wish to return to the factory defaults, tap the Load Factory Default button.
		Revert to last setting	After modifying the current settings, if you wish to return to the previous settings, tap the Revert to Last Setting button.

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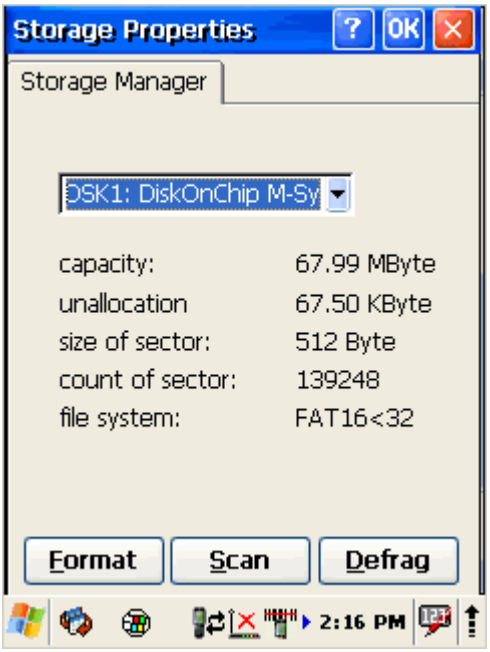
6.18 STORAGE MANAGER



To change the Storage Properties control panel default settings:

1. Insert secure digital (SD) storage card into the PDA. Select
   `Start > Settings > Control Panel > Storage Properties`
2. From the Storage manager pull-down list, select the desired storage device.
3. You can also format, perform scandisk and defrag.
4. To save and exit the **`Storage Properties`** control panel, press **`OK`** from the control bar, or press the **`< ENT >`** key on the keypad.

Formatting the DiskOnChip will erase all files and programs stored in Flash Memory.

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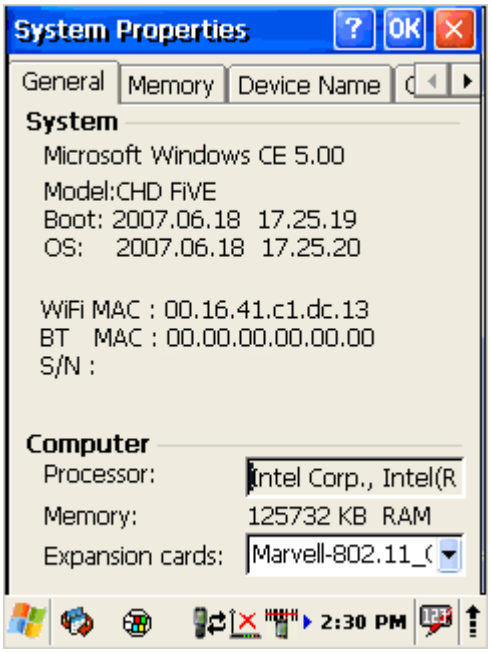
6.19 SYSTEM PROPERTIES

Refer to the System control panel for information related to the system.

6.19.1 General

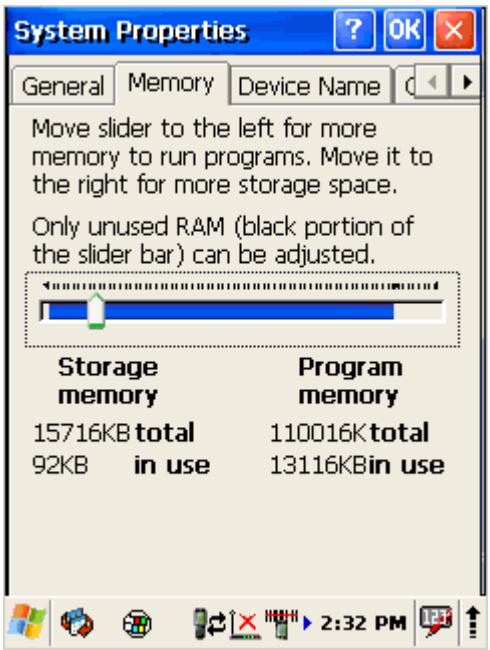


Select
`Start > Settings > Control Panel > System Properties > General` tab to determine the following information about your PDA:

- Operating system
- Model
- Boot time
- OS load time
- WiFi MAC address
- Bluetooth MAC address
- Devices Serial Number

Wireless device address is shown when wireless devices are turned on for the first time.

6.19.2 Memory



Move the slider to adjust memory allocation.
Move slider to the left for more memory to run programs.
Move it to the right for more storage space.

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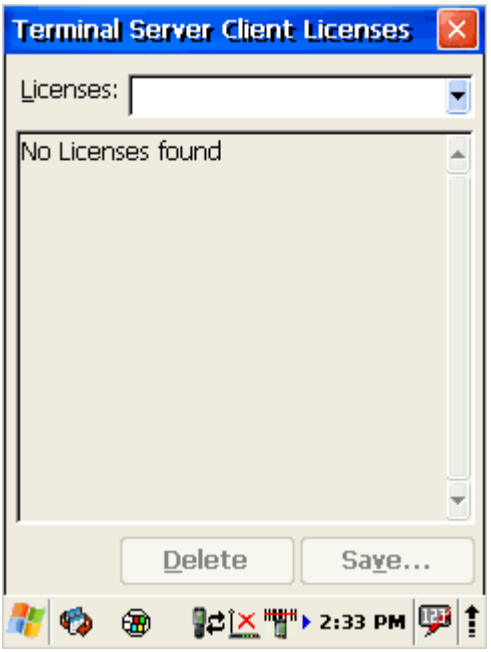
6.19.3 Device name

Your device uses this information to identify itself to other computers.
The Input Panel will open to facilitate data entry.

6.20 TERMINAL SERVER CLIENT LICENCES

Select
`Start > Settings > Control Panel > Terminal server client licenses`



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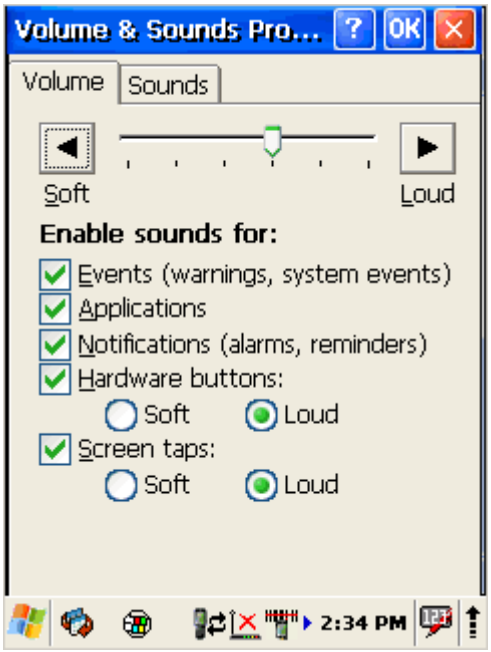
6.21 VOLUME & SOUNDS PROPERTIES

Select
`Start > Settings > Control Panel > Volume & sound`

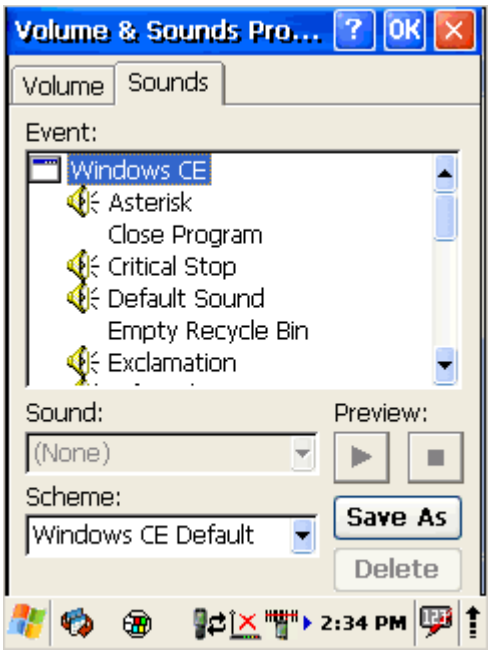
Adjust sound volume and enable sounds.



Change sounds for different items.

Copy custom wav file into /windows/ directory and select it from list.

To save and exit the **`Volume & sounds properties`** control panel, press **`OK`** from the control bar, or press the **`< ENT >`** key on the keypad.



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7 Networks, Communications and Connections

The screen shots in the manual were taken and the procedures were written using Windows® XP. If you are using Windows® NT or Windows® 2000, appearance and procedures may be slightly different.

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7.1 MICROSOFT® ACTIVESYNC

7.1.1 Installation

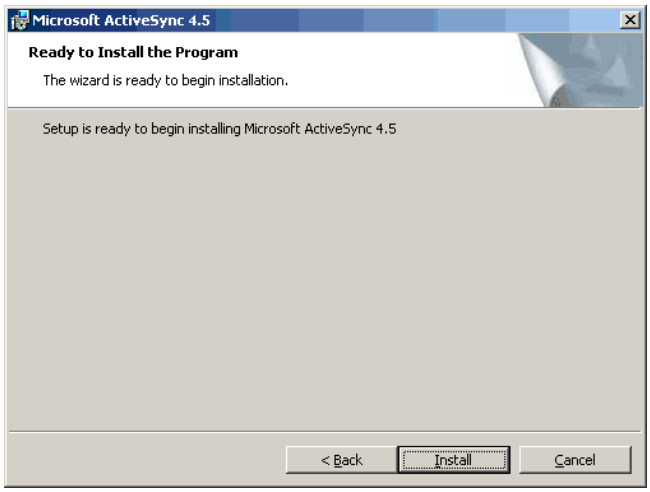
Microsoft® ActiveSync is a file transfer tool to synchronize the files on a PC with the files on your PDA. CHD Five comes from the factory with ActiveSync loaded.

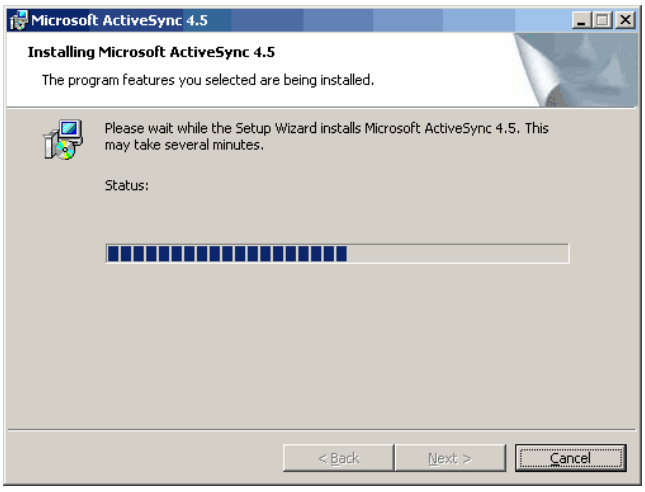
If you have ActiveSync already installed on your PC, make sure that you have v4.5 or higher.

To install Microsoft® ActiveSync, complete the following steps on the PC:
1. Download ActiveSync from Microsoft® Windows CE .NET website:

http://www.microsoft.com/mobile/pocketpc/downloads/.

2. Install the most current version of Microsoft® ActiveSync (v4.5 or higher) on the host PC


Microsoft ActiveSync 4.5
Ready to Install the Program
The wizard is ready to begin installation.
Setup is ready to begin installing Microsoft ActiveSync 4.5
< Back
Install
Cancel


Microsoft ActiveSync 4.5
Installing Microsoft ActiveSync 4.5
The program features you selected are being installed.
Please wait while the Setup Wizard installs Microsoft ActiveSync 4.5. This may take several minutes.
Status:
< Back
Next >
Cancel

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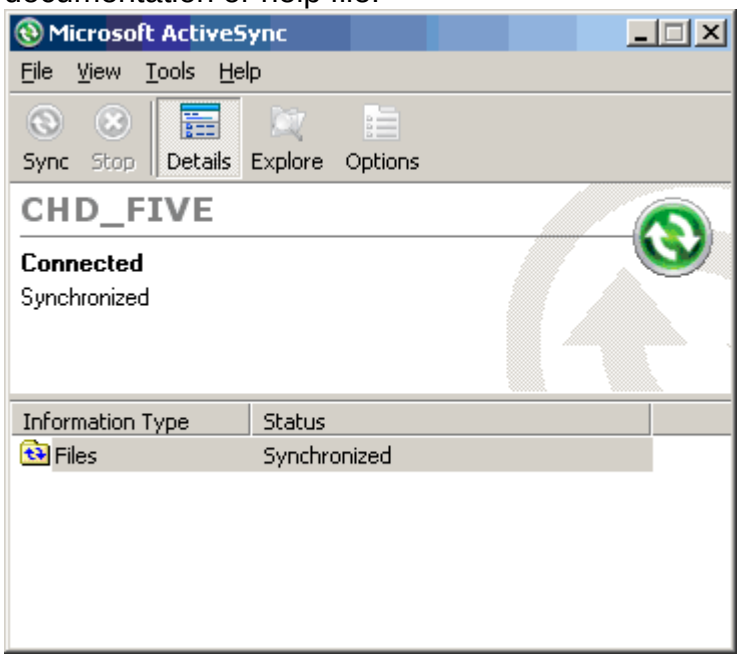
7.1.2 Setting up a Partnership

During the Microsoft ActiveSync installation, you were prompted to create partnership with your mobile device. When you set up partnership, you select synchronization and file conversion settings, which are contained in a file on your desktop computer. This file enables your desktop computer to recognize your device. Only devices that have partnership with a desktop computer can synchronize information between the two computers.
Partnerships are stored in ActiveSync and have the same name as the corresponding device. Your desktop computer can set up partnerships with many different mobile devices, but a device can have partnerships with only two computers.
For more information on partnerships, please refer to your Microsoft ActiveSync documentation or help file.



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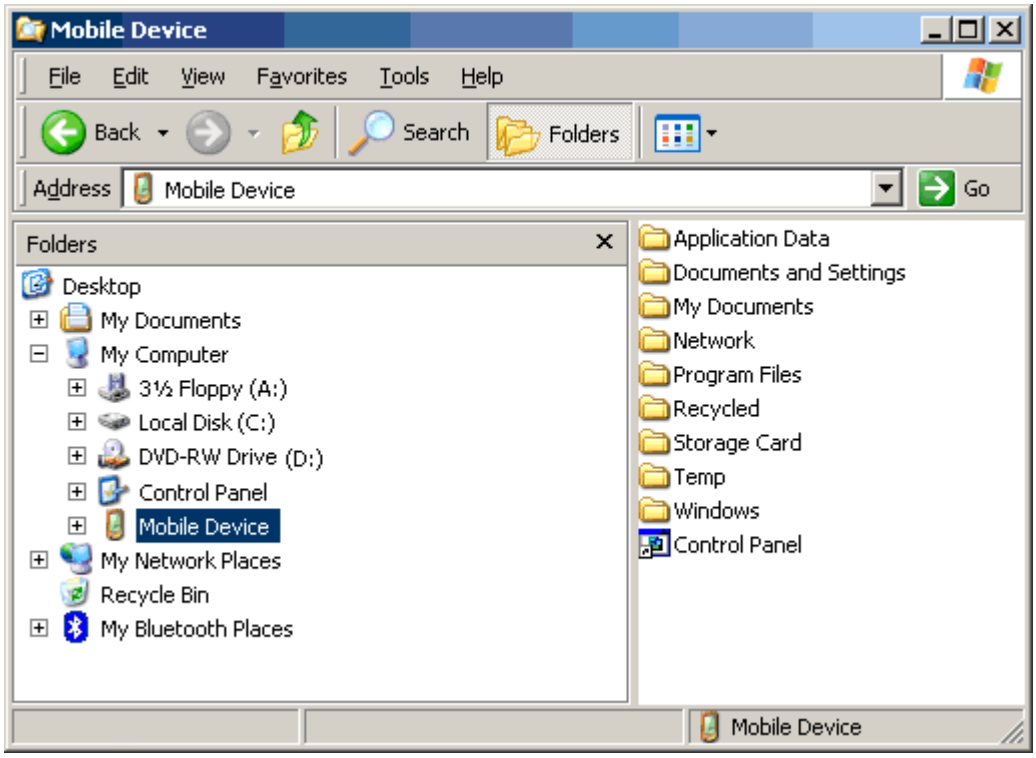
7.1.3 Exploring the Mobile Device

To transfer files, complete the following steps on the host PC:
Transferring Files

Select Start > Programs > Microsoft ActiveSync.

Double-click on the ActiveSync icon in the System Tool Tray.

After you have established a connection with your PDA, click on the Explore button at the top of the ActiveSync window (or select Explore from the File menu).



Navigate to the target directory on your portable and copy the desired file by using the Copy/Paste method or dragging and dropping the desired file(s) into the folder.
Depending on the file type, ActiveSync may convert the file into a format appropriate for the Windows CE .NET device.

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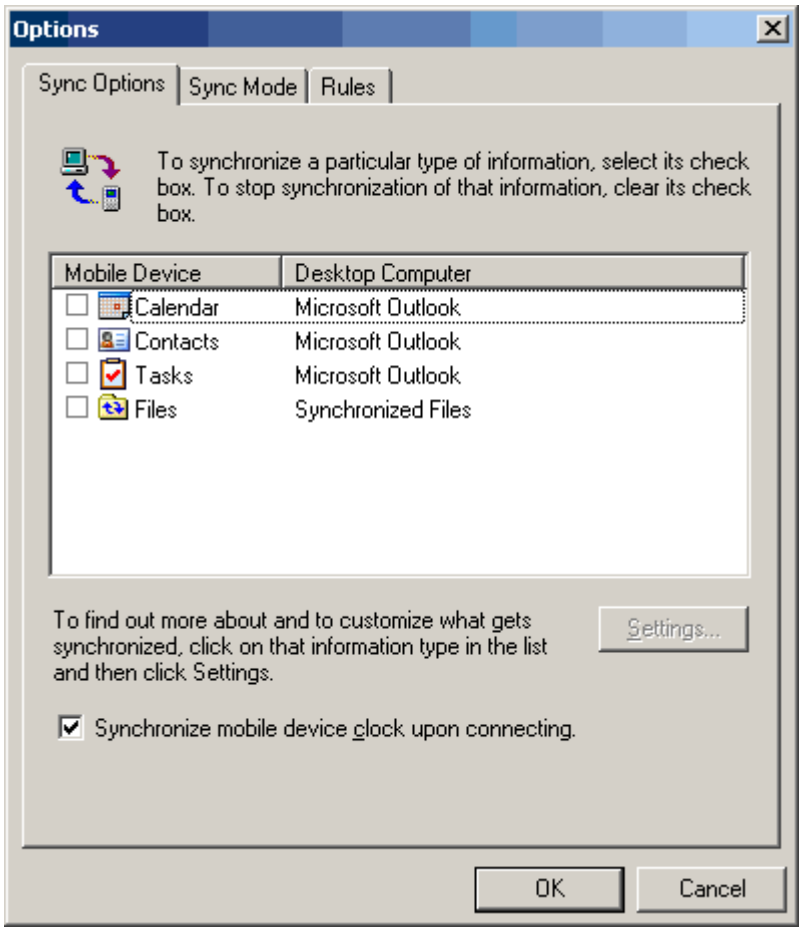
7.1.4 ActiveSync File Synchronization



ActiveSync file synchronization requires ActiveSync partnership between the CHD FiVE and the Host PC.

Select Tools >Options from the ActiveSync command bar to configure the synchronization options.

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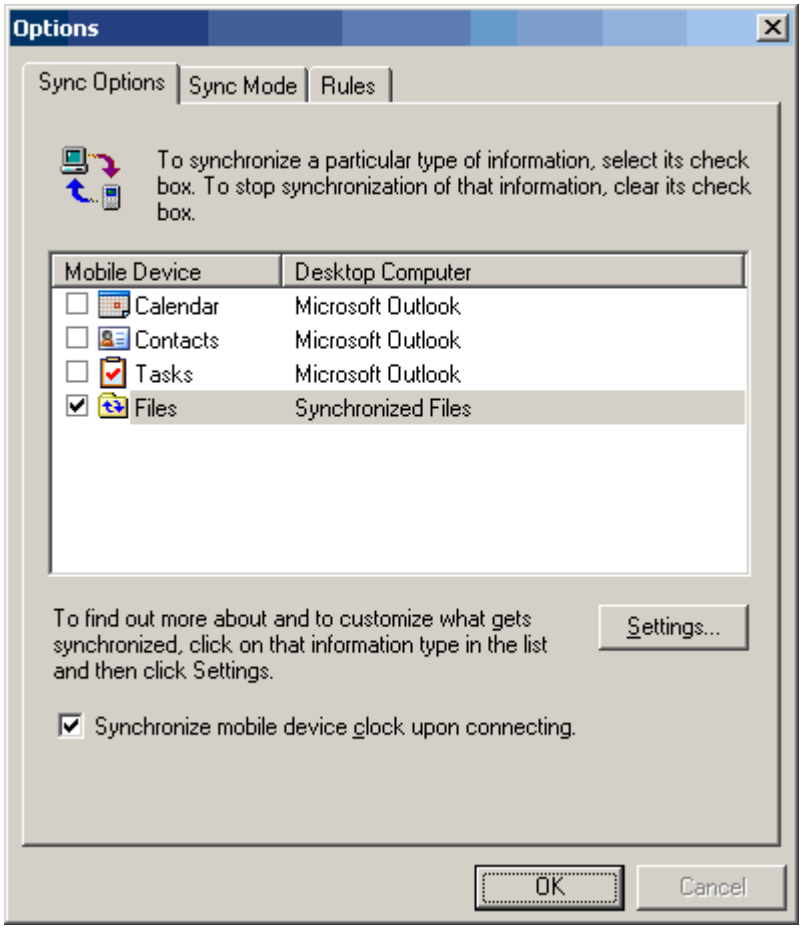

Place the file to be synchronized in the Synchronization folder created in your My Documents directory. During the ActiveSync connection, all files in the Synchronization folder will be synchronized to the \My Documents directory on the CHD Five.

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7.2 WIRELESS NETWORK

CHD FiVE comes from factory with default built in wireless network adapter. You can connect the device to secured wireless networks or open network.

To connect to secured network contact network administration.

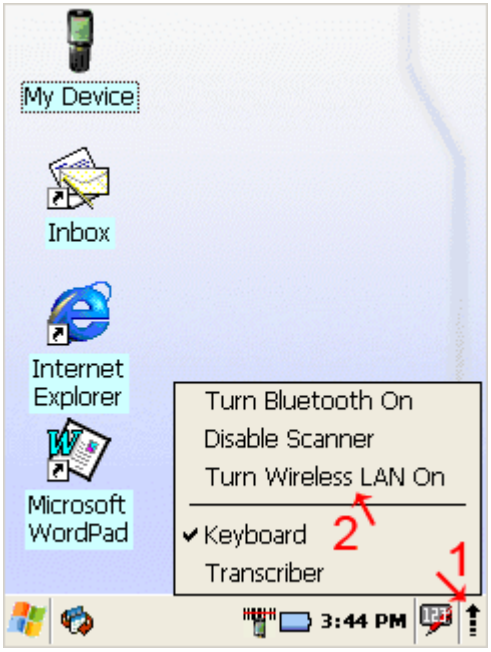
Wifi card MAC address can be found under
`Start > Settings > Control Panel > System`.
If no address is shown please turn Wireless LAN on.

7.2.1 Enabling Wireless LAN

1. Tap on arrow and open device control window
2. Select **`Turn Wireless LAN On`**

This also can be done by:
1. Open
   `Start > Settings > Control Panel > Power properties > Wireless power`
2. Select **`Wireless power ON`**

Wireless Icon appears on taskbar.



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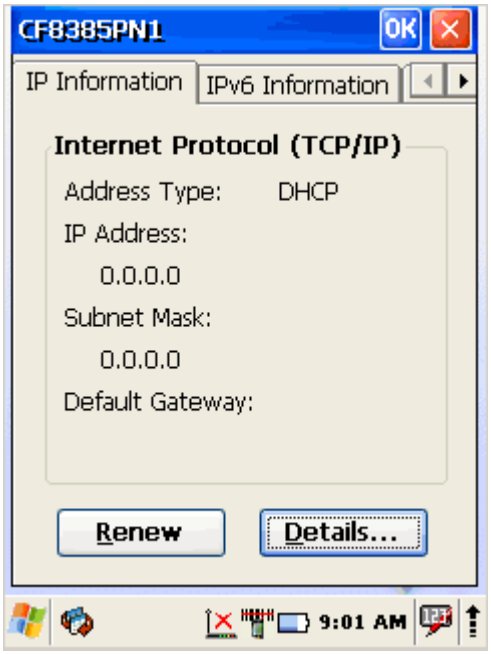
7.2.2 Set up wireless network

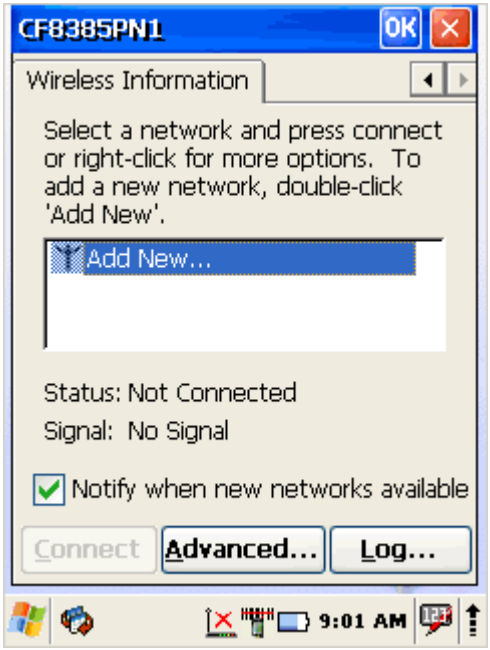
To set up connection to wireless network:

Double-tap on Network icon.



Select Wireless information

Select a network and press connect or right tap for more options. Double tap on **Add New …** to set up new connection when network is not visible.



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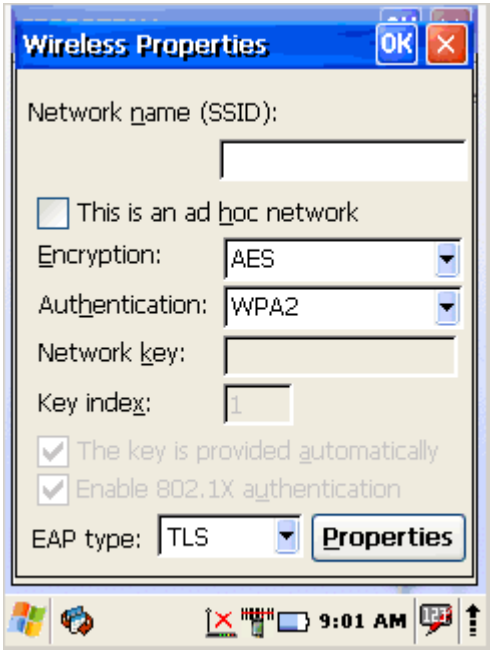

1. Enter **Network name (SSID)**
2. Check if **This is an ad hoc network**.

   Ad hoc is a network connection method when connection is established for the duration of one session and requires no base station. Instead, devices discover others within range to form a network for those computers. Devices may search for target nodes that are out of range by flooding the network with broadcasts that are forwarded by each node.

3. Select encryption

   AES - **Advanced Encryption Standard**

   TKIP **- Temporal Key Integrity Protocol**

4. Select authentication methods:

Open
Shared
WPA
WPA2
WPA2-PSK
WPA-PSK

Wi-Fi Protected Access (**WPA** and **WPA2**) is a class of systems to secure wireless (Wi-Fi) computer networks. WPA implements the majority of the IEEE 802.11i standard, and was intended as an intermediate measure to take the place of WEP while 802.11i was prepared. WPA is designed to work with all wireless network interface cards, but not necessarily with first generation wireless access points. WPA2 implements the full standard, but will not work with some older network cards.

Pre-shared key mode (PSK, also known as personal mode) is designed for networks without of an 802.1X authentication server. Each user must enter a passphrase to access the network. The pass phrase may be from 8 to 63 printable ASCII characters or 64 hexadecimal digits (256 bits). The pass phrase may be stored on the user's computer at their discretion under most operating systems to avoid re-entry. The pass phrase must remain stored in the Wi-Fi access point.

5. Enter **Network key** (network passphrase/ password) and if needed **Key index**.

6. Select **EAP type**

Extensible Authentication Protocol, or **EAP**, is a universal authentication framework frequently used in wireless networks and Point-to-Point connections.

TLS - Transport Layer Security

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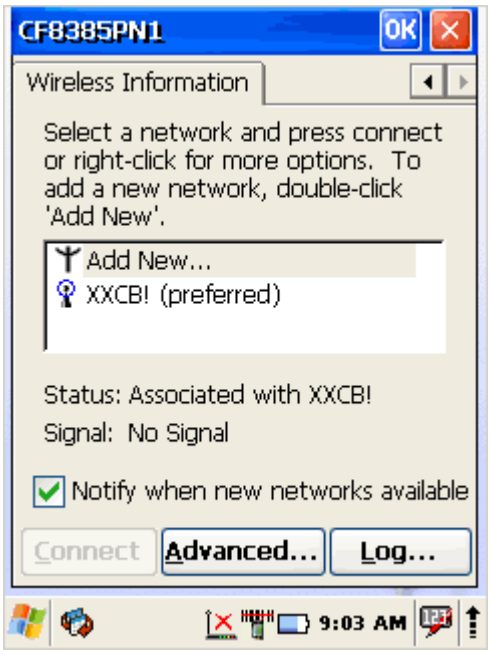
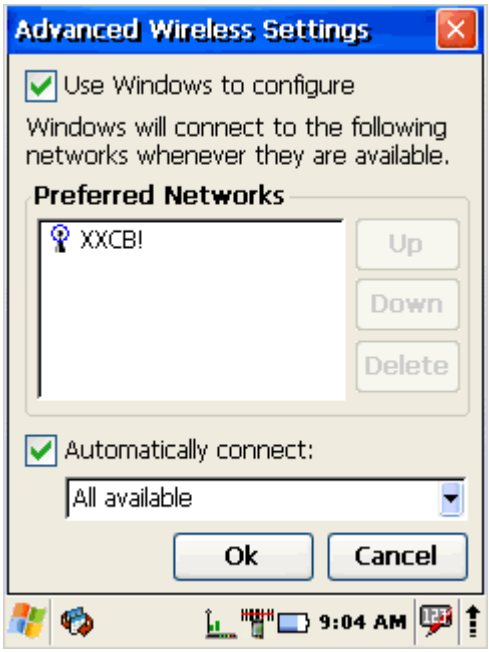
PEAP - Protected Extensible Authentication Protocol, Protected EAP, or simply PEAP, is a method to securely transmit authentication information, including passwords, over wired or wireless networks.

7.2.3 Preferred networks

In some areas there are more than one wireless networks available to connect.
Select wireless network and tap on **Advanced …** button.



Tap on Network name and use control buttons **Up/Down** to change priority or **Delete** – to remove network from the list.



7.2.4 Automatic connections

Also check to what device can be automatically connected:

- All available
- Only access points
- Only computer – to computer

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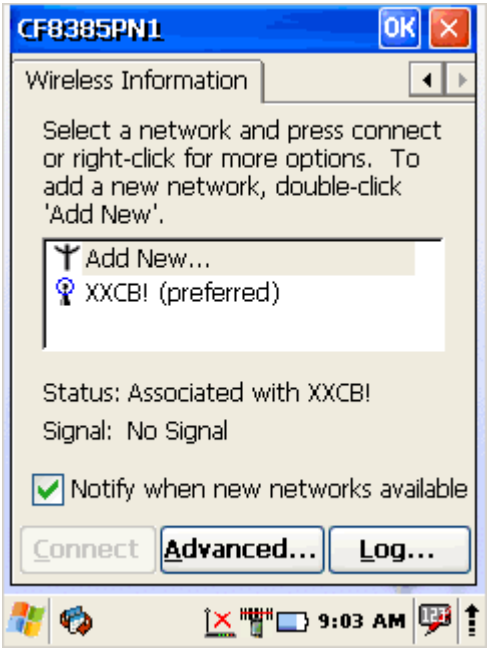
7.2.5 Connect to wireless network

Selected the desired connection and tap on Connect button.



About IP addresses or DHCP server –
see section: Change IP address or DHCP settings

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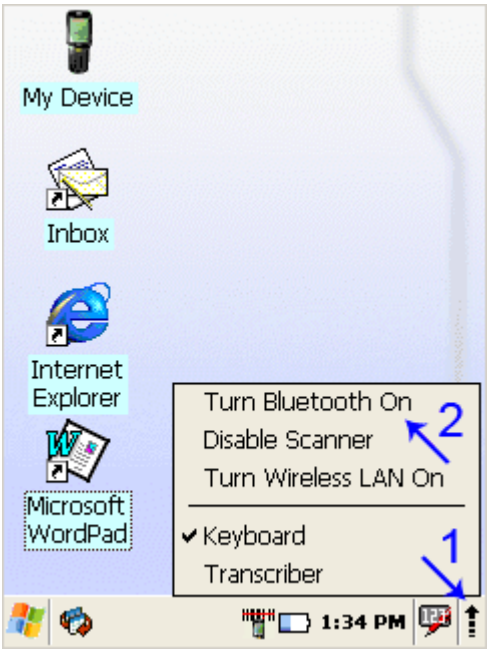
7.3 BLUE TOOTH

Bluetooth wireless technology is a short-range communications technology to connect portable and/or fixed devices while maintaining high levels of security.

7.3.1 Turn on Bluetooth



1. Select device panel
2. Tap on **`Turn Bluetooth On`**

3. In task bar Bluetooth icon appears

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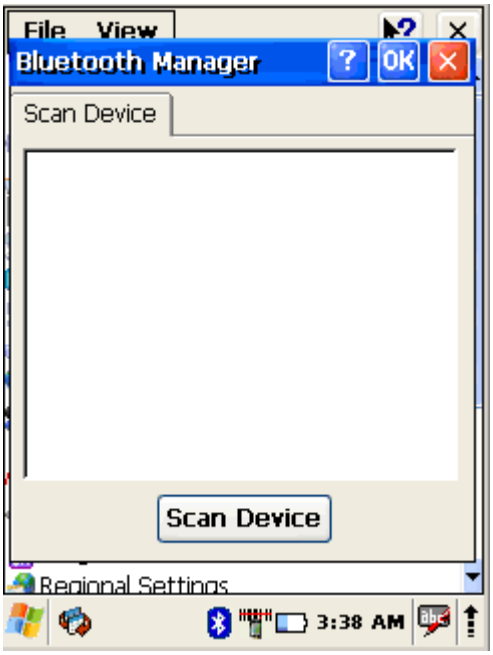
7.3.2 Connect to other devices



Before connecting make sure that other devices Bluetooth connection is enabled.

1. Double tap on Bluetooth icon in task bar or
   `Start-> Settings -> Control Panel -> Bluetooth device properties`
2. Bluetooth manager appears on screen

3. Tap **`Scan Device`** button

Available services of all devices in range will be shown in Bluetooth manager.

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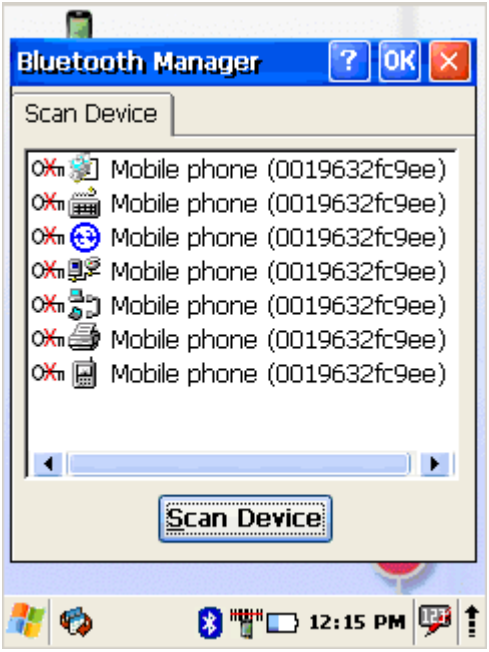
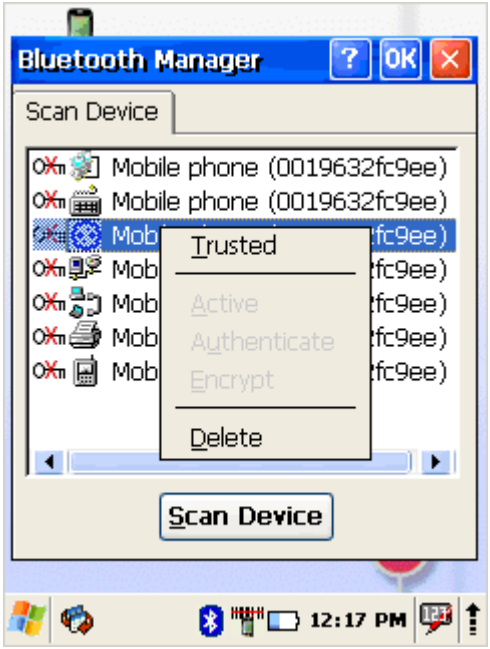
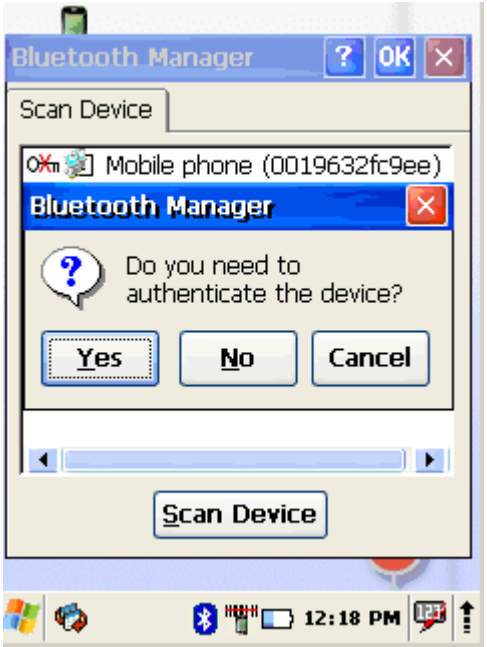
7.3.3 Pairing Bluetooth devices



To connect to Bluetooth device usually they must be paired – on each device entered the same passkey number.
If you connect to devices without input methods (printers, headsets etc.), please refer to devices user manual about pairing.

1. Double tap on desired devices service
2. Select **Trusted** from dropdown menu
3. You will be prompted
4. Click on **Yes** button
5. Enter random 4 digits (if pairing with device without possibility to input (refer to devices user manual) and tap on **Yes**
6. Enter the same digits on other device when prompted.
7. After pairing double tap on devices service and select **Active**





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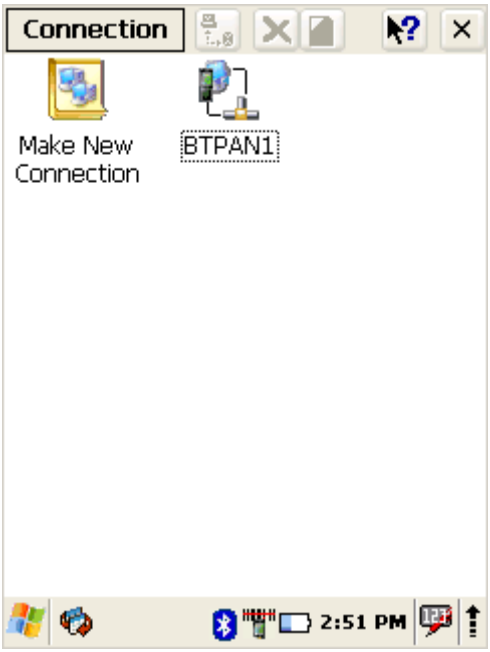
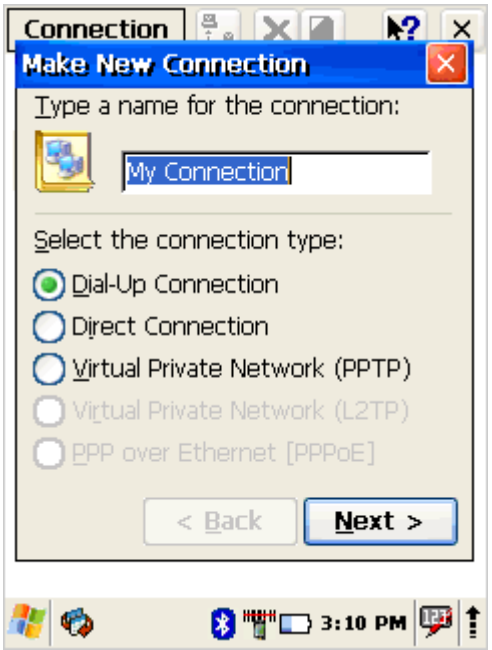
7.3.4 Setting up connection to mobile phone

Use GSM mobile phone as modem to connect to Internet using GPRS (***G**eneral **P**acket **R**adio **S**ervice*) data connection.
Contact your mobile phone provider about GPRS configuration, coverage and fees and check mobile phone manual if your phone supports GPRS data transfer and has a Bluetooth connection available.
This is also available if your mobile phone and network supports 3G data transfer.

1. Check if your mobile phone is configured and connected to GPRS.
2. Turn mobile phones Bluetooth on
3. Select
   `Start > Settings >`
   `Network and Dial-up Connections`
4. Double tap on **`Make New Connection`**



`5.` Chose **`Dial-up connection`** and press **`Next`**



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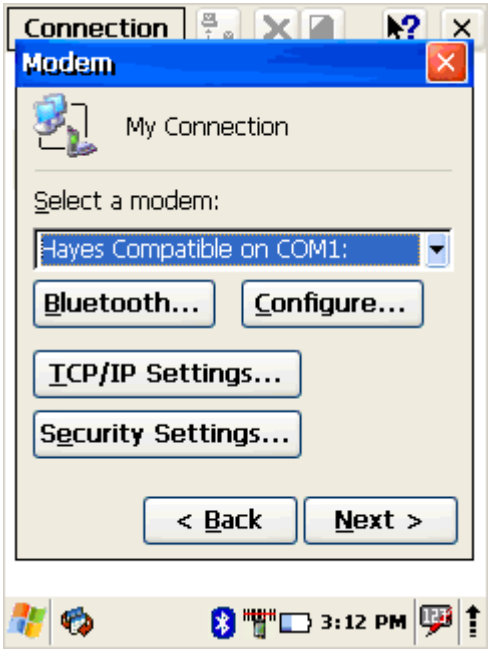
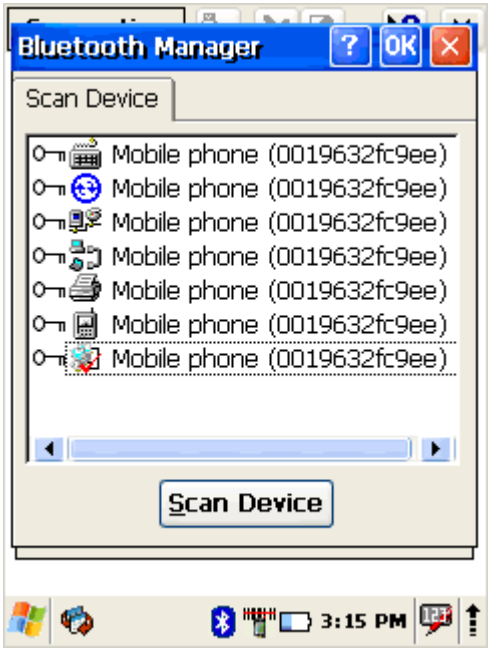
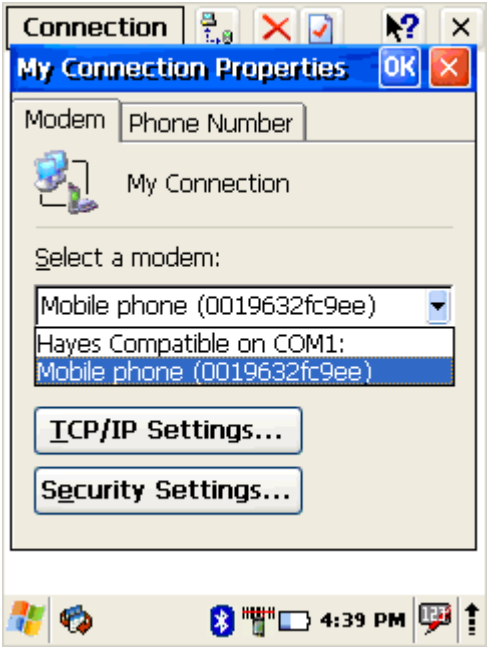
6. Press **Bluetooth**
7. Select and activate data modem service of your mobile phone (see more - Pairing Bluetooth devices) and press **OK**





8. From **Select a modem**: dropdown menu select Mobile phone modem and press Next



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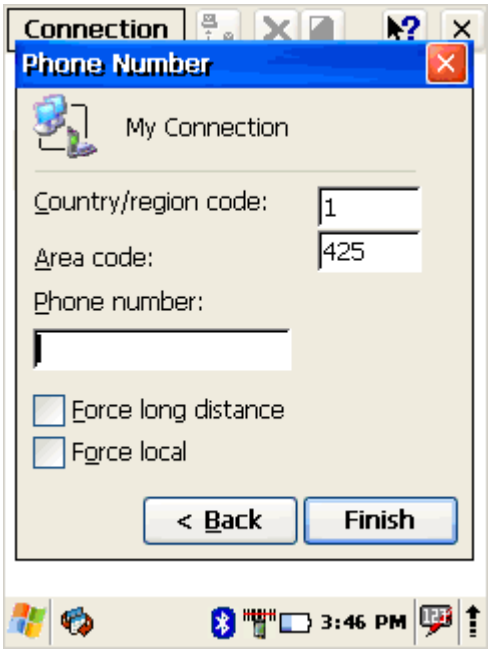
9. Enter dial-up phone number (contact mobile network services provider for more information about connecting to the Internet using mobile phone)

10. Tap on **Finish**



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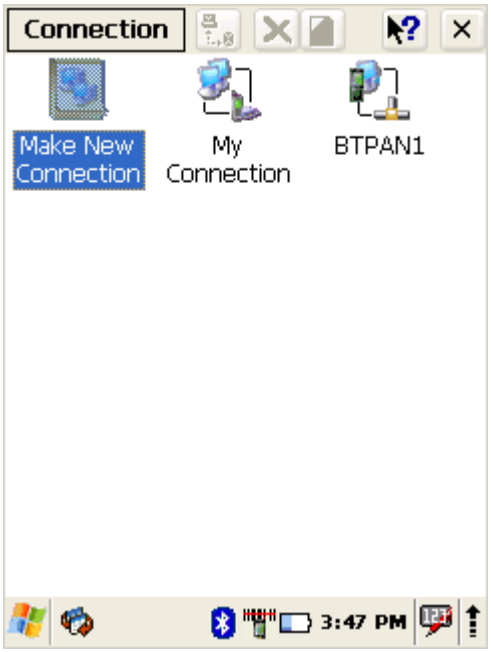
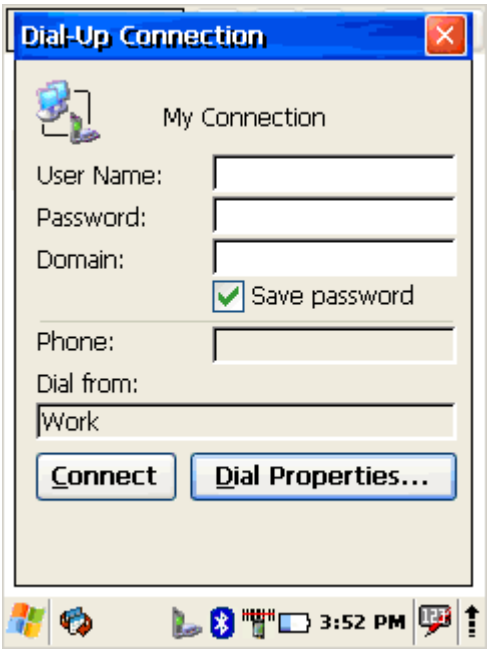
7.3.5 Connecting to the Internet

1. Double tap on New connection



2. Enter **Username, Password** and **Domain** (contact mobile phone service provider)



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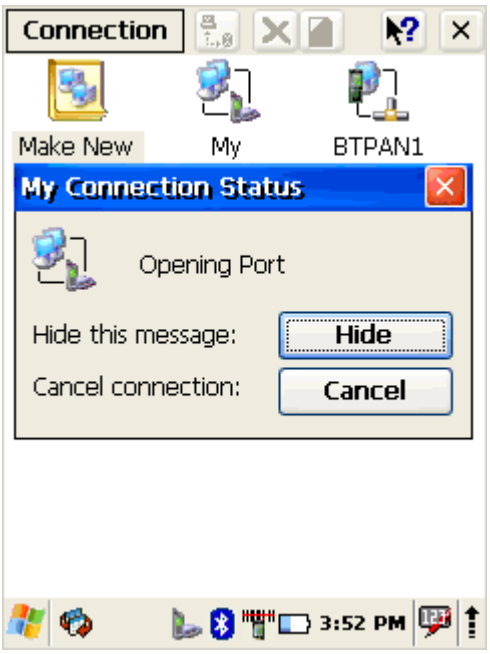
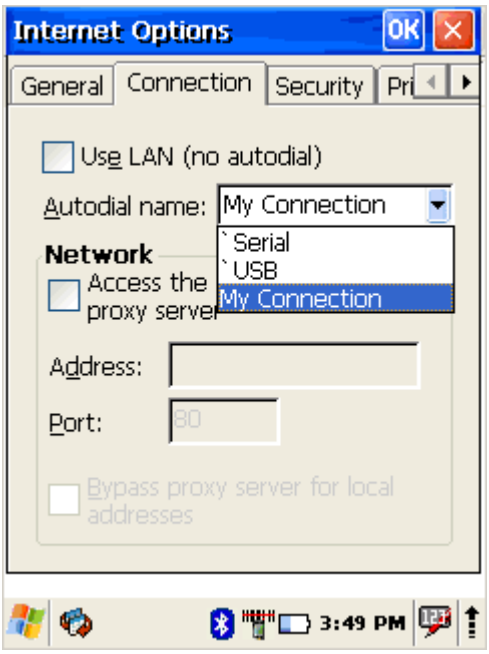
3. Press **Dial properties…** to edit dialling codes and prefixes.
4. Tap on **Connect** to connect mobile phone.



5. Run Internet Explorer
6. Select
   `Tools > Options > Connection tab`
7. From **Autodial name** dropdown list select created connection



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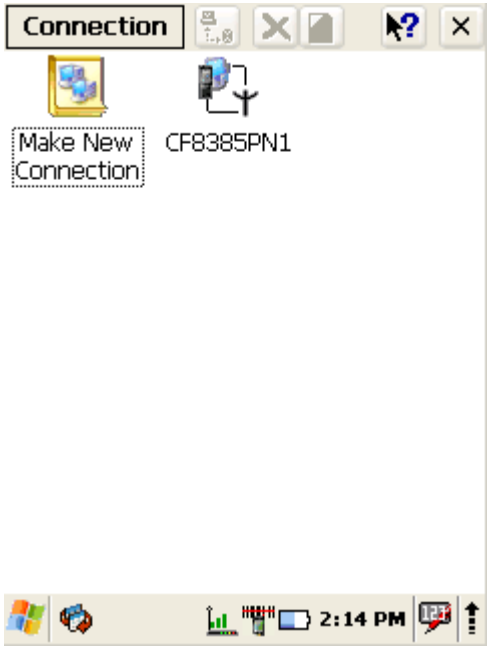
7.4 VIRTUAL PRIVATE NETWORK

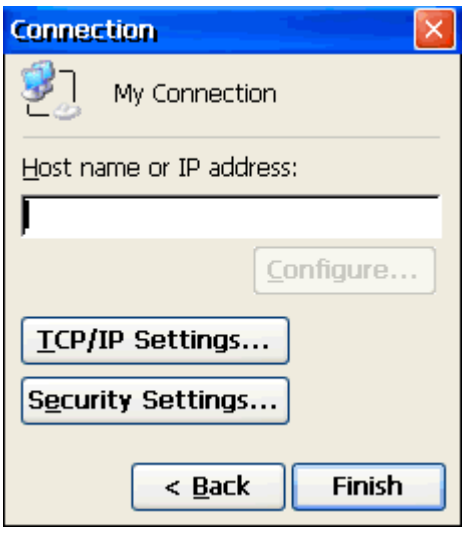
Virtual private network (VPN) is a private communications network often used to communicate confidentially over a public network. VPN traffic can be carried over public networks on top of standard protocols, or over a service provider's private network. A VPN can send data across secured and encrypted private channels between two points.

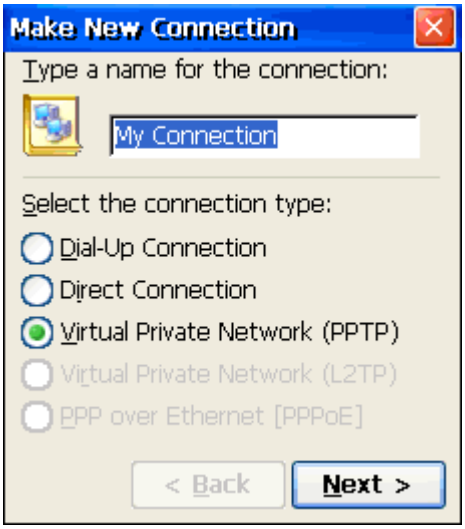
7.4.1 Setting up Virtual Private Network connection

To set up VPN connection to secured server

1. Open `Start > Settings > Network and Dial-up connection`
2. Double tap on **`Make new connection`**
3. Enter connection name, ex., My Connection
4. Select **`Virtual Private Network (PPTP)`**
5. Tap on **`Next`**
6. Enter Host name or IP address
7. Check **`TCP/IP Settings …`**
8. Check **`Security settings…`**
   Enable **`Preview user name and password`** if you need to enter username and password when logging into VPN server. This option will show login screen when connecting to VPN.
9. Tap on **`Finish`** button.







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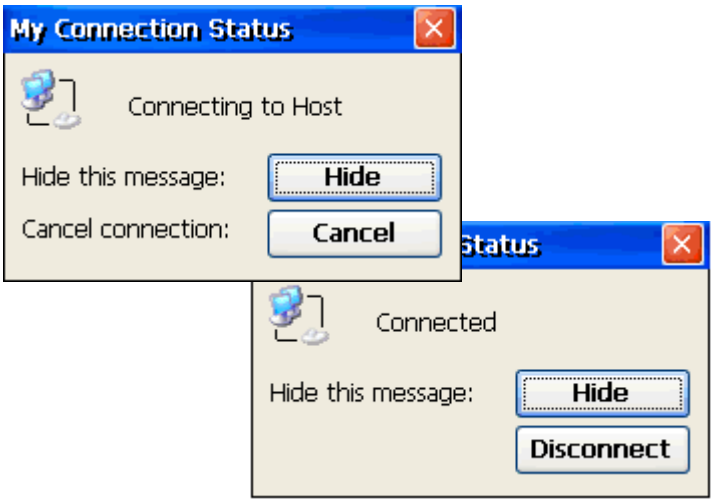
7.4.2 Connect to VPN network

1. Open
   `Start > Settings > Network and Dial-up connections`
2. Double tap on VPN connection
3. Enter **`Username, Password`** and **`Domain`**
4. Click on **`OK`**
5. After authorization tap on **`Hide`** to hide status window.

According to VPN network specifics – you will need to reconnect to your VPN network if device is turned off and on.



To disconnect from VPN network

1. Double tap on VPN icon in task bar
2. Click **`Disconnect`**

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8 Accessories

8.1 CRADLE

Charging and data communication cradle is sold separately. Please contact your CHD FiVE for more information.

Dimensions: 135mm (W) x 110mm (D) x 95mm (H)

To insert CHD FiVE into cradle hold device vertically.

Additional battery charging slot is located on back of cradle.
Green indicator – charging complete
Red indicator – charging.

Connectors:

- Serial
- Mini USB
- Power

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